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MILITARY STANDARD GENERATORS PROTOTYPE MODIFICATIONS
VOLUME II - 30 kW DOD GENERATOR SET

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Prepared for:

U.S. Army Belvoir Research, Development and Engineering Center
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SUMMARY

The 30 kW DoD Generator Sets were modified for sound attenuation and reliability improvements according to government approved designs. A test program, performed in accordance with a government approved test plan showed the design concepts to be sound in principle. Further testing for reliability should be performed by the user, and all deficiencies occurring during these tests should be corrected.

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PREFACE

This report was prepared under the authority of Task Order 0088 to U.S. Army Belvoir Research, Development and Engineering Center (Belvoir) Contract No. DAAK70-86-D-0023. Contract No. DAAK70-86-D-0023 requires VSE Corporation to provide engineering and technical support for a wide range of projects being performed at Belvoir. Task order 0088 is concerned with the modification and improvement of 15 kW, 30 kW, and 60 kW Military Standard Diesel Engine Driven (DED) Generator Sets.

Documentation of the task efforts and results is furnished in three volumes:

- o Volume I - 15 kW DOD Generator Set.
- o Volume II - 30 kW DOD Generator Set.
- o Volume III - 60 kW DOD Generator Set.

The authors of this report wish to acknowledge the valuable guidance and contributions provided by Mr. Noel D. Bishop, Mr. Bobby C. Jones, and Ms. Selma J. Nawrocki of Belvoir's Power Distribution Division.

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MILITARY STANDARD GENERATORS PROTOTYPE MODIFICATIONS

VOLUME II - 30 kW DoD GENERATOR SET

1. INTRODUCTION

1.1 Statement Of The Problem. Existing 30 kW DoD Military Standard Diesel Engine Driven (DED) Generator Sets must be modified to reduce sound levels and vibration. These sets must also be improved for reliability and operational features. Government Furnished Data (GFD) for these modifications and improvements must be evaluated, and receive government approval, for subsequent manufacturing and testing of prototype sets.

1.2 Background. This Task Order 0088 under Belvoir Contract No. DAAK70-86-D-0023 is the third in a series of three tasks which are intended to result in modified and improved military generator sets to include the 30 kW DoD Military Standard DED Generator Set. The first task (No. 0067) was a market investigation which deliberately involved industry in the product improvement process in order to ensure that state-of-the-art materials and manufacturing techniques and processes were considered. Suggestions from industry were reviewed and those considered valid, achievable, and cost effective (given program constraints) were forwarded to Belvoir as recommended improvements. The second task (No. 0076) required a more detailed engineering evaluation and analysis of the improvements approved by the Government, which included the sound attenuation design previously used on the Regency Net set. Delivered under this task were Level 1 engineering drawings supported by calculations, and other engineering data for all improvements. The second task also included a requirement to identify a new engine for the 60 kW generator set. The third task, for which this report is written, required work and services on 12 generator sets; two each: 15 kW, 60 Hz; 15 kW, 400 Hz; 30 kW, 60 Hz; 30 kW, 400 Hz; 60 kW, 60 Hz; and 60 kW, 400 Hz.

1.3 Purpose Of Report. The purpose of this report is to detail the modifications to the 30 kW DoD Generator Sets, the purpose for which they were made, problems which were encountered during testing, and the solutions which were applied.

1.4 Scope Of Report. The test results and findings presented in this report are limited to the 30 kW, 60 Hz and 30 kW, 400 Hz DED generator sets only. The period of this report is 19 July 1987 through 31 March 1988.

1.5 Reference To Related Work. Task Orders 0067 and 0076 under Belvoir Contract No. DAAK70-86-D-0023 provided knowledge and data, used with other GFD, to accomplish the work specified in this task order (0088).

1.6 Disposition Instructions. Destroy this report when no longer needed. Do not return it to the originator.

2. INVESTIGATION

2.1 Technical Requirements. The basic technical requirements for performance of this task order were to: perform an engineering evaluation and analysis of GFD; manufacture, modify, and test prototypes; and, document all work and services. Specifically, VSE Corporation was required to:

- o Review, analyze, and evaluate GFD and DOD-D-1000 Level 1 drawings for a concept developed by Regency Net and BBN Laboratories, Inc. These data pertained to sound attenuation, reduced vibration, and improved reliability and operational features for the 30 kW generator set and companion 15 kW and 60 kW generator sets.
- o Procure, prototype manufacture, and install improved assemblies/subassemblies (including components) and changes in accordance with government approved recommendations resulting from task orders 0067 and 0076 of this contract, and from the above mentioned evaluation of GFD.
- o Procure and install components to improve the reliability and operational features as specified and as shown in the Statement of Work, "Technical Requirements For Sound Attenuating Modification And Reliability Improvements".
- o Test modified and improved generator sets according to the government approved test plan shown in Appendix A (Basis of This Report).

2.2 Technical Approach. The technical approach used to complete testing of the 30 kW Generator Set was based on three steps:

- o Pre-modification testing to establish baselines for post-modification tests.
- o Modification of generator sets.
- o Post-modification testing to determine if modifications produced desired results.

All testing was accomplished at a subcontractor facility (National Technical Systems, Hartwood, VA).

3. DISCUSSION

3.1 30 kW DoD Generator Set Modifications

3.1.1 Scheduled Modifications. Modifications scheduled for incorporation into the 30 kW Generator Sets were:

- o Installation of sound attenuation kits.
- o Installation of vibration isolation mounts between the engine/generator assembly and the skid base.

- o Relocation of the manual throttle cable.
- o Pull-out battery rack.
- o Improved door latches.
- o Relocation of engine exhaust outlet.
- o Low coolant level protection.
- o Solar charging kits.
- o Improved fuel filter/water separators.

3.1.2 Modifications For Sound Attenuation. The sound attenuation kit design used for all of the generator sets was based on the concept employed during the modification of the 15 kW Military Standard generator sets for Regency Net application.

The modification included the installation of vibration isolation mounts between the engine/generator and the skid frame; lining the interior of the enclosure, including the doors with sound attenuation panels; installation of a larger more efficient exhaust muffler, the addition of cooling air inlet, and discharge silencers and engine air inlet silencer. Improved door latches were also scheduled for installation, however, they were not available prior to the conduct of testing with the exception of rail impact testing on three sets. The engine cooling fan/water pump speed was reduced from 2025 RPM to 1800 RPM, 1:0 to 1:0 ratio, by reducing the size of the crankshaft drive pulley. This was done to lower the noise level generated by the cooling fan.

3.2 Reliability Improvements. The installation of the vibration isolation mounts for sound attenuation is expected to improve reliability through the reduction of vibration related failures.

The battery rack modification provided for a slide out tray to facilitate battery maintenance, thus reducing battery related failures.

A low coolant level sensor was installed to prevent severe engine damage in the event of a major coolant leak.

A solar battery charging kit was installed to maintain the set batteries in a charged condition throughout long periods of shut-down.

A fuel filter/water separator equipped with a high water level warning light was installed in an effort to reduce fuel contamination related failures.

At the conclusion of all modifications the 400 Hz set weighed 3650 lb and the 60 Hz set weighed 3550 lb for an average weight increase of 675 lbs over the unmodified sets.

When the generator set is trailer mounted the stowage angle of the rear tread plate must be changed to 35 degrees from the vertical to provide clearance.

The trailer tow eye weight, with the generator set installed is 375 lbs. The placards have been modified to reflect all electrical and center of gravity changes which have resulted from the modifications.

Pictures of the modified sets are presented in Figure 1.

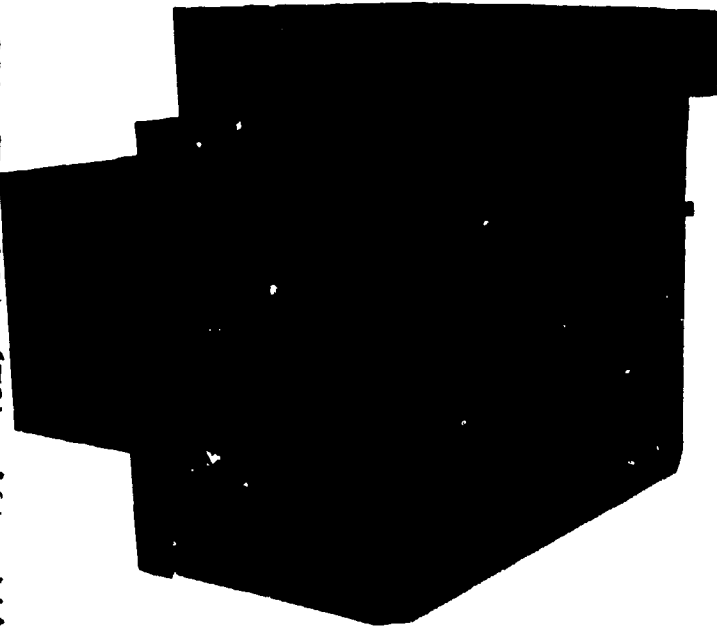
3.3 Testing

3.3.1 Pre-modification Tests. Prior to any modifications testing was conducted to document the baseline noise levels and certain performance characteristics of each generator set. Noise level testing was in accordance with the provisions of MIL-STD-1474 frequency and voltage regulations, stability and transient response testing was in accordance with provisions of Test Method 608.1 of MIL-STD-705.

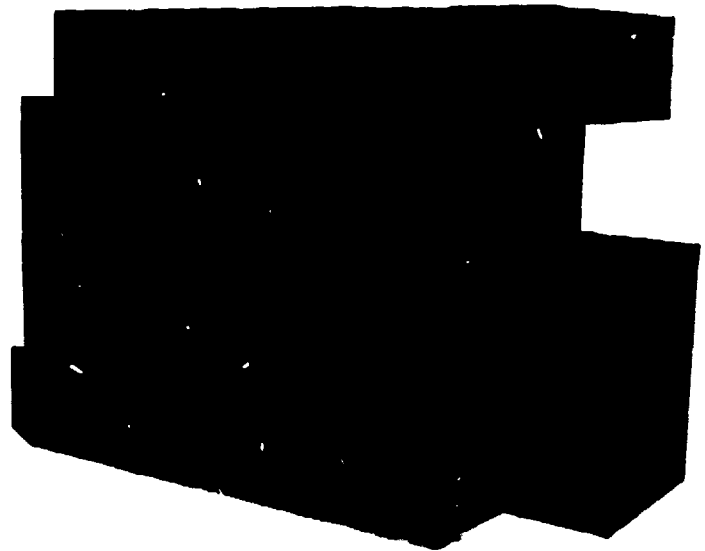
In order to expedite the modification schedule, the first 30 kW, 60 Hz unit SN RZ 53774 scheduled for modification was not subjected to Test Method 608.1 prior to modification.

3.3.2 Scheduled Tests. The following series of testing was conducted to evaluate the effects of the modifications on overall performance characteristics. These tests were performed in accordance with the provisions of MIL-STD-705, Method 710.1, "High Temperature Test":

Method 401.1	Winding Resistance Test.
Method 511.1	Regulator Range Test.
Method 511.2	Frequency Adjustment Range Test.
Method 512.1	Circuit Interrupter Test (Short Circuit).
Method 512.2	Circuit Interrupter Test (Overload Trip).
Method 512.3	Circuit Interrupter Test (Overvoltage Undervoltage).
Method 513.3	Indicating Instrument Test (Electrical).
Method 608.1	Frequency and Voltage Regulation, Stability and Transient Response Test (Short Term).
Method 608.2	Frequency and Voltage Stability Test (Long Term).
Method 619.2	Voltage Dip and Rise for Rated Load Test.
Method 655.1	DC Control Test.
Method 710.1.2.1(h)	(Hot Restart).



Right Front View.



Right Rear View.



Trailer Mounted View.

Figure 1. 30 kW (Modified) Military Standard Generator Set.

The tests below, also performed according to MIL-STD-705, were conducted at prevailing ambient conditions:

Method 515.2	Over Temperature Protective Device Test.
Method 640.1	Maximum Power Test.
Method 740.3	Drop Test (Ends).
Method 740.5	Railroad Impact.

3.3.3 Test Procedure. At the conclusion of the modification phase, testing was conducted to insure that the performance characteristics of the generator sets were not adversely affected by any of the modifications.

The general procedures used to conduct testing were as described in the Test Plan, Appendix A. With the exception of Noise Level, Drop and Railroad Impact tests, all testing was conducted with the generator set placed in an environmental chamber. The chamber's ambient temperature was maintained at +125 °F for all tests with the exception of Maximum Power, Over Temperature Protective Device, and the baseline Winding Resistance Test which were conducted at Normal Ambient Conditions.

3.3.4 Test Results. For ease of identification, each generator set has been assigned a reference number. These numbers are:

<u>Set No.</u>	<u>Set Identification</u>
No. 1	30 kW, 60 Hz S/N RZ53774
No. 2	30 kW, 60 Hz S/N RZ05841
No. 3	30 kW, 400 Hz S/N KZ40323
No. 4	30 kW, 400 Hz S/N KZ70003

All test results are presented in tabulated form in Figures 2 through 5. The tabulations indicate pass or failure findings for each test as well as a brief comment regarding non-compliances. Non-compliances and problems encountered are discussed in greater detail in paragraph 3.3.5, "Test Comments", of this report. Precise values for all test results are in Appendix B, "Test Data", of this report.

3.3.4.1 Noise Level Test. Noise level values for all of the 30 kW units measured prior to and after modification are presented in Figures 6 through 9 for comparison. The after modification values represent the units in final configuration, after adjustments had been made, to correct cooling problems including the removal of the center panel from the cooling air discharge silencer.

All of the values appearing in Figures 6 through 9 are for the highest levels recorded during the rated load or no load conditions for the station indicated.

GENERATOR SET, 30 kW, 60 Hz S/N RZ 53774 (Set No. 1)

PRE-MODIFICATION BASELINE TESTS

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD 1474 Sound Level	N/A	N/A	
(608.1) Freq. and Voltage Regulation Stability and Transient Response			Test not conducted

POST-MODIFICATION TESTS HIGH TEMPERATURE (710.1)

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
(511.1) Regulator Range	X		None
(511.2) Frequency Adj. Range		X	Frequency could not be adjusted to 62 Hz
(512.1) Circuit Interrupter (Short Circuit)	X		None
(512.2) Circuit Interrupter (Overload Current)		X	Excessive trip time at 130% overload
(512.3) Circuit Interrupter (Overvoltage/Undervoltage)	X		None
(513.2) Indicating Instrument		X	Excessive voltmeter error
(608.1) Freq. and Voltage Regulation Stability and Transient Response		X	Frequency regulation in excess of allowable
(608.2) Freq. and Voltage Stability (Long Term)		X	Frequency regulation in excess of allowable
(619.3) Voltage Dip and Rise for Rated Load	X		None
(655.1) D.C. Control		X	Voltage would not adjust to 32 volts
(401.1) Winding Resistance	X		No manufacturer's data available for resistance comparison
(710.1.1.3h) High Temp. Restart	X		None

POST-MODIFICATION TESTS (PREVAILING AMBIENT)

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD-1474 Sound Level	X		None
(401.1) Winding Resistance	X		None
(515.2) Overtemperature Protective Device		X	Shut down temp. too high No indicator light
(640.1) Maximum Power		X	No meterological data to correct observed value
(608.1) Pre-Drop		X	Voltage regulation in excess of allowable
(740.3) Drop Test (Ends)		X	Some damage was sustained
(608.1) Post Drop		X	Voltage regulation in excess of allowable
(740.5) Rail Impact		X	Some damage sustained

Figure 2. Tabulated data - Set No. 1

GENERATOR SET, 30 kW, 60 Hz S/N KZ 05841 (Set No. 2)

PRE-MODIFICATION BASELINE TESTS

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD 1474 Sound Level	N/A	N/A	
(608.1) Freq. and Voltage Regulation Stability and Transient Response	X		None

POST-MODIFICATION TESTS HIGH TEMPERATURE (710.1)

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
(511.1) Regulator Range	X		None
(511.2) Frequency Adj. Range	X		None
(512.1) Circuit Interrupter (Short Circuit)	X		None
(512.2) Circuit Interrupter (Overload Current)	X		None
(512.3) Circuit Interrupter (Overvoltage/Undervoltage)	X		None
(513.2) Indicating Instrument		X	Excessive Ammeter error
(608.1) Freq. and Voltage Regulation Stability and Transient Response	X		None
(608.2) Freq. and Voltage Stability (Long Term)	X		None
(619.3) Voltage Dip and Rise for Rated Load	X		None
(655.1) D.C. Control		X	Voltage would not adjust to 32 volts
(401.1) Winding Resistance	X		No manufacturers data available for resistance comparison
(710.1.1.3h) High Temp. Restart	X		None

POST-MODIFICATION TESTS (PREVAILING AMBIENT)

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD-1474 Sound Level	X		None
(401.1) Winding Resistance	X		None
(515.2) Overtemperature Protective Device			Test not conducted
(640.1) Maximum Power	X		None
(608.1) Pre-Drop	X		None
(740.3) Drop Test (Ends)	X		Slight damage sustained
(608.1) Post Drop	X		None
(740.5) Rail Impact			Test not conducted

Figure 3. Tabulated data - Set No. 2.

GENERATOR SET, 30 kW, 400 Hz S/N RZ40323 (Set No. 3)			
PRE-MODIFICATION BASELINE TESTS			
TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD 1474 Sound Level	N/A	N/A	
(608.1) Freq. and Voltage Regulation Stability and Transient Response		X	Exceeded maximum allowable voltage regulation
POST-MODIFICATION TESTS HIGH TEMPERATURE (710.1)			
TEST METHOD AND NAME	PASS	FAIL	COMMENTS
(511.1) Regulator Range		X	Exceeded maximum allowable voltage regulation
(511.2) Frequency Adj. Range		X	Frequency could not be adjusted to 420 Hz
(512.1) Circuit Interrupter (Short Circuit)	X		None
(512.2) Circuit Interrupter (Overload Current)			Test not conducted
(512.3) Circuit Interrupter (Overvoltage/Undervoltage)		X	Required excessive trip voltage and time
(513.2) Indicating Instrument		X	Excessive ammeter and wattmeter error
(608.1) Freq. and Voltage Regulation Stability and Transient Response		X	Exceeded maximum allowable voltage regulation
(608.2) Freq. and Voltage Stability (Long Term)		X	Exceeded maximum allowable voltage regulation
(619.3) Voltage Dip and Rise for Rated Load			Data not reducible. Possible test equip. failure.
(655.1) D.C. Control		X	Charging voltage could not be adjusted
(401.1) Winding Resistance	X		No manufacturer's data available for resistance comparison
(710.1.1.3h) High Temp. Restart	X		None
POST-MODIFICATION TESTS (PREVAILING AMBIENT)			
TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD-1474 Sound Level		X	Noise level exceeded 70 dBA at 2 positions at 7 meters
(401.1) Winding Resistance	X		None
(515.2) Overtemperature Protective Device		X	Test not conducted
(640.1) Maximum Power	X		None
(608.1) Pre-Drop		X	Exceeded maximum allowable voltage regulation
(740.3) Drop Test (Ends)		X	Cooling air discharge silencer frame broke at weld
(608.1) Post Drop		X	Exceeded maximum allowable voltage regulation
(740.5) Rail Impact			Test not conducted

Figure 4. Tabulated data - Set No. 3.

PRE-MODIFICATION BASELINE TESTS

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD 1474 Sound Level	N/A	N/A	
(608.1) Freq. and Voltage Regulation Stability and Transient Response		X	Exceeded max. allowable voltage regulation

POST-MODIFICATION TESTS HIGH TEMPERATURE (710.1)

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
(511.1) Regulator Range			Test not conducted
(511.2) Frequency Adj. Range			Test not conducted
(512.1) Circuit Interrupter (Short Circuit)	X		None
(512.2) Circuit Interrupter (Overload Current)			Test not conducted
(512.3) Circuit Interrupter (Overvoltage/Undervoltage)		X	Required excessive trip time
(513.2) Indicating Instrument		X	Excessive voltmeter, ammeter and wattmeter error
(608.1) Freq. and Voltage Regulation Stability and Transient Response		X	Test aborted due to high temperature
(608.2) Freq. and Voltage Stability (Long Term)			Test not conducted
(619.3) Voltage Dip and Rise for Rated Load			Test not conducted
(655.1) D.C. Control			Test not conducted
(401.1) Winding Resistance			Test not conducted
(710.1.1.3h) High Temp. Restart	X		None

POST-MODIFICATION TESTS (PREVAILING AMBIENT)

TEST METHOD AND NAME	PASS	FAIL	COMMENTS
MIL-STD-1474 Sound Level		X	Noise level exceeded 7 dBA at 1 position at 7 meters
(401.1) Winding Resistance			Test not conducted
(515.2) Overtemperature Protective Device			Test not conducted
(640.1) Maximum Power			Test not conducted
(608.1) Pre-Drop			Test not conducted
(740.3) Drop Test (Ends)	X		Unit could not be operated after drop test
(608.1) Post Drop			Test not conducted
(740.5) Rail Impact			Test not conducted

Figure 5. Tabulated data - Set No. 4.

GENERATOR SET 30 KW 60 HZ SN 22 53774

(Set No. 1)

NOISE LEVELS IN dBA

B = BEFORE MODIFICATION

A = AFTER MODIFICATION

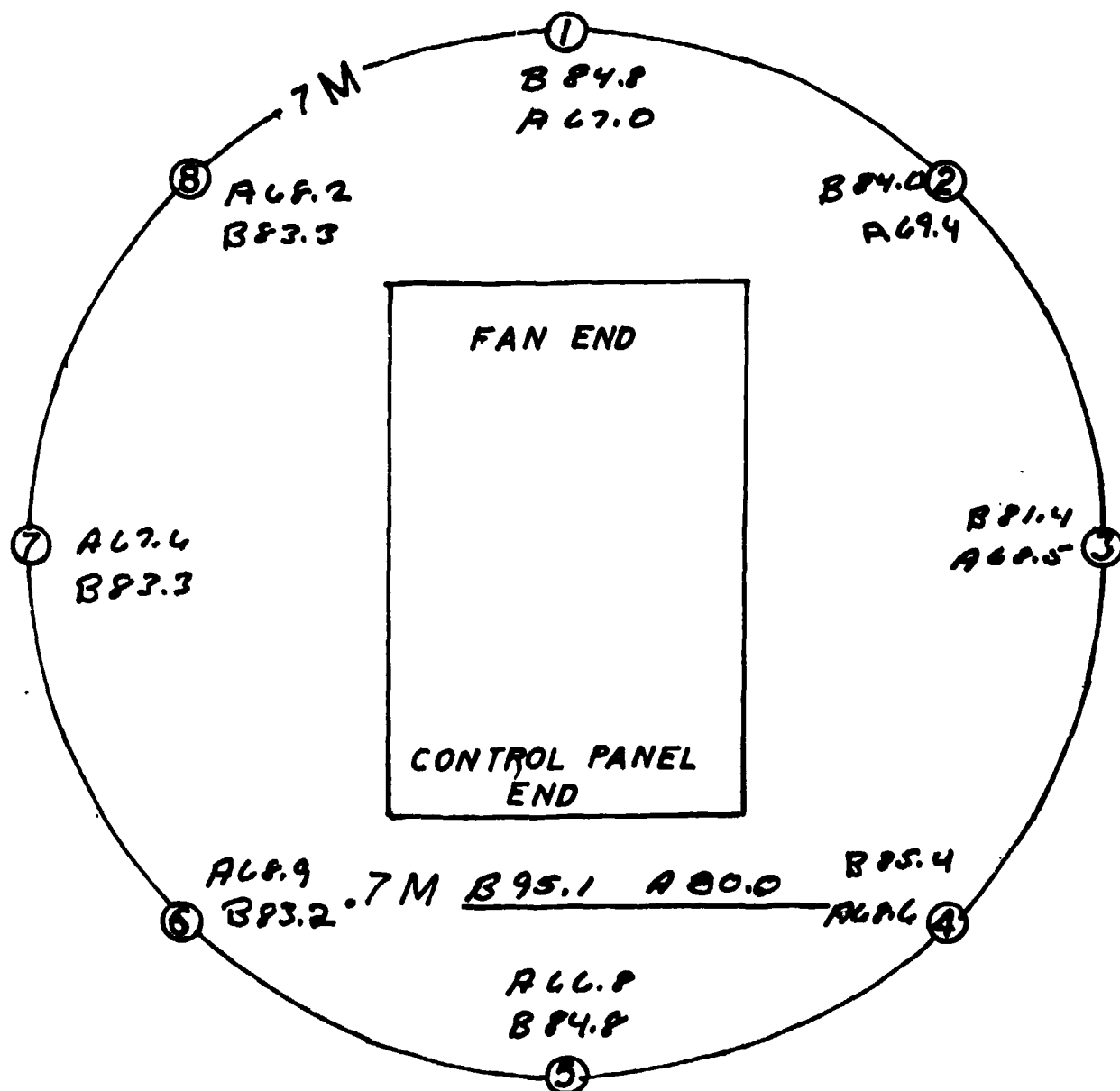


Figure 6. Noise level values - Set No. 1.

GENERATOR SET 30 KW 60 HZ SN 42 05841

(Set No. 2)

NOISE LEVELS IN dBA

B = BEFORE MODIFICATION

A = AFTER MODIFICATION

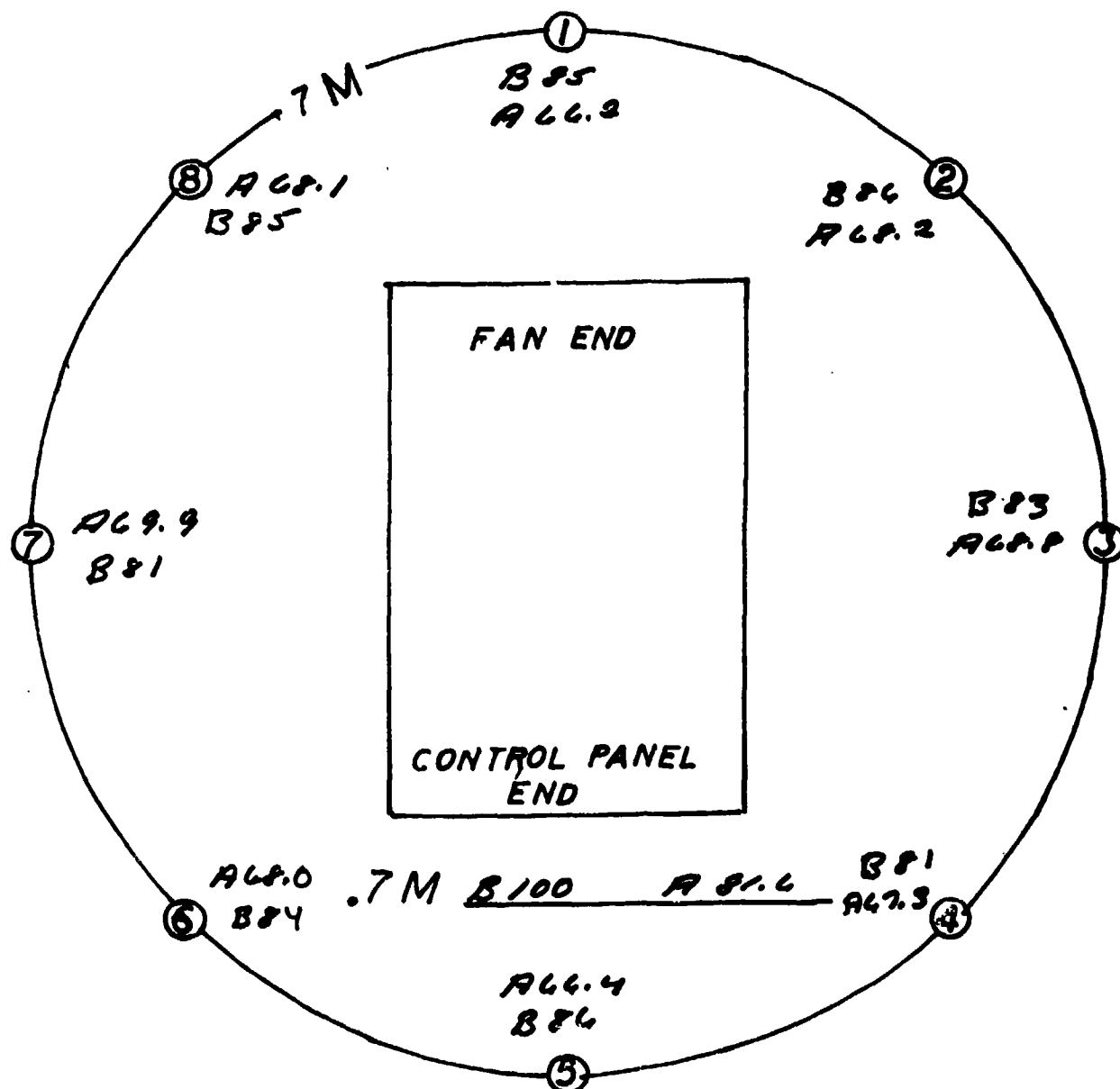


Figure 7. Noise level values - Set No. 2.

GENERATOR SET 30 KW 400 HZ SN RZ 40323

(Set No. 3)

NOISE LEVELS IN dBA

B = BEFORE MODIFICATION

A = AFTER MODIFICATION

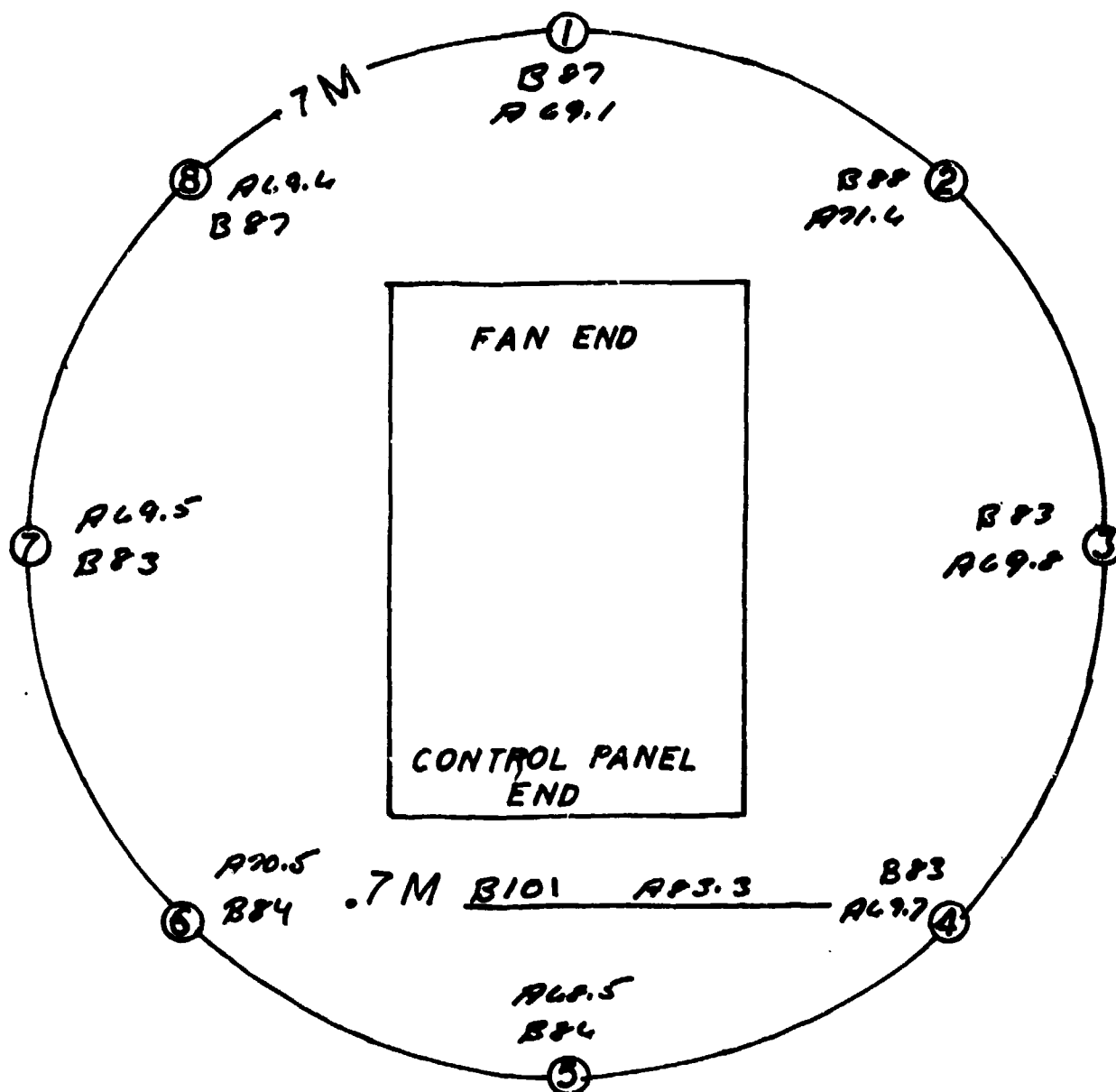


Figure 8. Noise level values - Set No. 3.

GENERATOR SET 30 KW 400 HZ SN R2 70003

(Set No. 4)

NOISE LEVELS IN dBA

B = BEFORE MODIFICATION

A = AFTER MODIFICATION

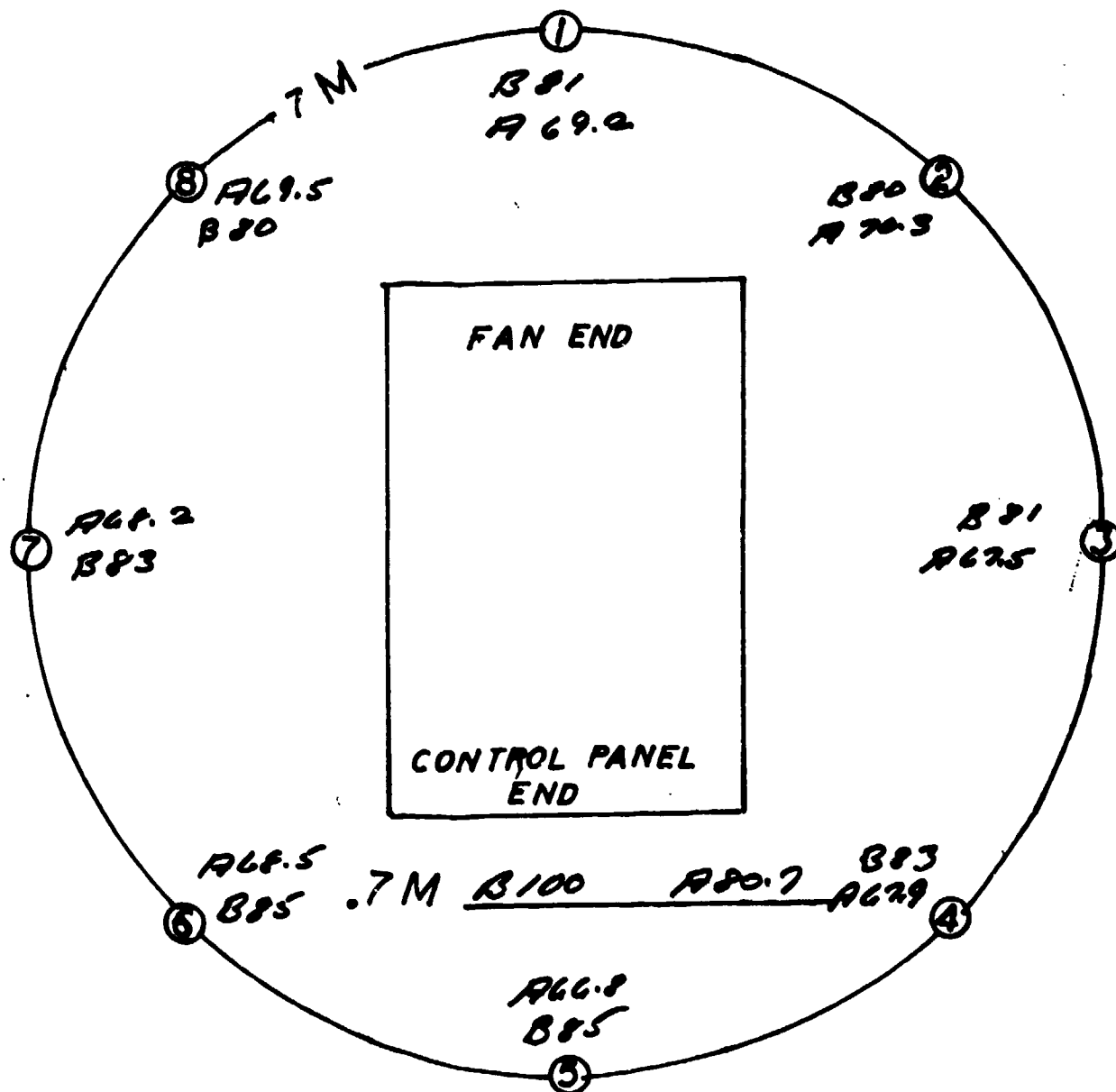


Figure 9. Noise level values - Set No. 4.

As can be seen, the noise levels measured at .7 of a meter from the control panel have been reduced to below the 85 dBA target level in all cases.

Noise levels measured at 7 meter were below the target 70 dBA level for sets No. 1 and 2; however, noise levels measured at the cooling fan end of sets No. 3 and 4 remained above the 70 dBA level. The levels were higher for sets No. 3 and 4 due to the higher fan speed inherent with the 400 Hz units.

All noise level measurements taken at all conditions for all 30 kW units, including those with which to establish an 85 dBA perimeter profile, can be seen in the data section of this report.

3.3.4.2 Frequency and Voltage Regulation, Stability and Transient Response Pre-Modification. Set No. 2 was in compliance with all performance requirements for this test. Voltage regulation for Sets No. 3 and 4 exceeded the maximum allowable by 1.5 percent. Set No. 1 was not scheduled for this test.

3.3.4.3 High Temperature. Sets No. 1, 2 and 3 were successfully operated at high temperature after engine cooling problems were resolved. These problems and their resolution are discussed, in detail in paragraph 3.3.5 of this report. Set No. 4 developed governor and engine cooling problems and it was necessary to abort a majority of remaining tests pending resolution of the problems. The test program was terminated before the problems could be corrected.

3.3.4.4 Regulation Range Test. Sets No. 1 and 2 were in compliance with all requirements for this test. Set No. 3 exceeded the maximum allowable voltage regulation by .39 percent. This test was not performed on Set No. 4.

3.3.4.5 Frequency Range Adjust Test. Set No. 2 was in compliance with all requirements for this test. Set No. 1 frequency could only be adjusted to 61.9 Hz, .1 Hz below the required 62 Hz. Set No. 3 frequency could only be adjusted to 412.2 Hz, 7.8 Hz below the required 420 Hz. Set No. 4 was not subjected to this test.

3.3.4.6 Circuit Interrupter Test (Short Circuit). Sets 1, 2, 3 and 4 were in compliance with all requirements for this test with maximum trip times of 58, 40, 44 and 25 MS respectively.

3.3.4.7 Circuit Interrupter Test (Overload Current). Set No. 2 was in compliance with all requirements for this test. Set No. 1 Circuit Interrupter failed to open within the maximum allowable 10 minutes after the application of 130 percent overload. The circuit interrupter required 10 minutes and 42 seconds to respond. Sets No. 3 and 4 were not subjected to this test.

3.3.4.8 Circuit Interrupter Test (Over Voltage and Under Voltage). Sets No. 1 and 2 were in compliance with all requirements for this test. Set No. 3 exceeded the maximum allowable trip voltage by 3-volts during the 155 volt test and exceeded the trip time by .23 sec during the 99 volt test. Set No. 4 exceeded the maximum allowable trip time by .11 seconds during the 155 Volt test and failed to trip during the 99 volt test.

3.3.4.9 Indicating Instrument Test (Electrical). Set No. 1 Volt meter error was 3.61 percent, 1.11 percent in excess of the maximum allowable. Set No. 2 ammeter error was 8.86 percent, 2.86 percent in excess of the maximum allowable. Set No. 3 ammeter error was 11.96 percent, 5.96 percent in excess of the maximum allowable and wattmeter error was 16.9 percent, 6.9 percent in excess of the maximum allowable. Set No. 4 voltmeter error was 4.8 percent, 2.3 percent in excess of the maximum allowable, ammeter error was 19 percent, 13 percent in excessive of maximum allowable and the wattmeter error was 10.5 percent, .5 percent in excessive of maximum allowable.

3.3.4.10 Frequency and Voltage Regulation Stability and Transient Response. Set No. 1 exceeded the maximum allowable frequency regulation by .83 percent. Set No. 2 was in compliance with all of the requirements for this test. Set No. 3 exceeded the maximum allowable voltage regulation by .25 percent. The testing of Set No. 4 was aborted because of engine cooling problems.

3.3.4.11 Frequency and Voltage Stability Test (Long Term). Set No. 1 frequency regulation exceeded the maximum allowable by .66 percent. Set No. 2 was in compliance with all requirements of this test. Set No. 3 exceeded the maximum allowable voltage regulation by .25 percent. Set No. 4 was not subjected to this test.

3.3.4.12 Voltage Dip and Rise. Sets No. 1 and 2 were in compliance with all requirements for this test. The data for Set No. 3 was not readable, possibly due to test equipment failure. Set No. 4 was not subjected to this test.

3.3.4.13 D.C. Control. The battery charging voltage for Sets No. 1, 2 and 3 could not be adjusted to the required 32 volts. This test was not conducted on Set No. 4.

3.3.4.14 Hot Restart Test. Sets No. 1, 3 and 3 restarted and operated properly after the 45 minute shutdown at high temperature. Set No. 4 restarted properly but failed to continue operation due to a previous governor problem.

3.3.4.15 Winding Resistance Test. Winding temperature rise determined through the winding resistance method for Sets No. 1, 2 and 3 ranged from a low of 33.6 °C to a high of 69.3 °C with all temperatures being below the maximum allowable of 90 °C for Class "B" insulation and 100 °C for Class "F" insulation. There was no manufacturer's data available with which to make resistance comparisons. Set No. 4 was not subjected to this test.

3.3.4.16 Over Temperature Protective Device. Set No. 1 coolant temperature reached 227 °F, 2 °F above the maximum allowable before automatic shut down occurred. The fault indicator failed to light. This test was not conducted on Set Nos. 2, 3 and 4.

3.3.4.17 Maximum Power. The observed maximum power for Set No. 1 was 37.41 kW, .09 kW below the required 37.5 kW. There was no meteorological data recorded with which to correct the observed value. The corrected maximum

power for Sets Nos. 2 and 3 was 48.1 and 48.6 kW respectively. This test was not conducted on Set No. 4.

3.3.4.18 Drop Test. Set No. 1 voltage regulation exceeded the maximum allowable by .08 percent prior to the drop test and by .11 percent after the test. Set No. 2 conformed to all voltage and frequency regulation requirements prior to and after the drop test. Set No. 3 exceeded the maximum allowable voltage regulation before and after drop testing by 1.08 percent and 1.16 percent respectively. The voltage and frequency regulation tests were not performed on Set No. 4 due to engine problems.

Set No. 1 sustained some minor damage as a result of the drop test. The battery tray slides and locking pin were bent. A weld in the top sheet metal cracked. The top panel bent causing some door interference. The fuel tank shifted, thus bending the vent lines. All of the doors with the exception of the right front and battery compartment came open. The outer insulation jacket on the exhaust silencer wrinkled in several places.

The cooling air discharge silencer panels became misaligned on Set No. 2. The inlet cooling air silencer screen bowed outward. The battle short and circuit breaker indicator lights would not function after the test. All of the doors came open. The cooling air discharge silencer frame on Set No. 3 broke at the welds. All of the doors came open.

Set No. 4 could not be operated after the test because of excessive noise coming from the generator during operation. All of the doors came open.

3.3.4.19 Rail Impact. The following damage occurred to Set No. 1 during testing: The front engine trunion mount shifted and became wedged in a forward position; The engine cooling fan impacted the shroud; The instrument panel doors came open and the phase selector switch handle fell off; The cooling air discharge silencer panels shifted from the retainer slots; The cooling radiator slid down on the adjustment slots; The battery compartment doors came open; and, The fuel tank vent lines became detached.

The cooling air inlet and auxiliary air inlet silencer panels on Set No. 4 slid forward during impact, causing a slight bulging of the inlet screen; the battery rack slid forward, damaging the door sound attenuation panels and bending the door latches, allowing the doors to open, and; the latches on the front left door bent allowing the doors to open. The fan shroud, front engine trunion mount and the cooling air discharge silencer modifications which were made after testing Set No. 1 prevented a recurrence of the problems encountered in these areas.

Sets 2 and 3 were not tested.

3.3.5 Test Comments

In order to conduct a comprehensive analysis of the test data within the proper perspective it first becomes necessary to consider the initial program goals, the modifications designed to achieve them, and the potential effect of the modifications on performance characteristics.

The two primary goals were to reduce noise levels and improve reliability.

The design changes necessary to reduce noise levels presented the greatest potential effect on performance characteristics. Some of the changes designed to reduce noise had an adverse effect on engine cooling. The reduction of the engine cooling fan speed to reduce noise also lowered the flow of cooling air and water. The installation of silencers on the cooling air inlet and discharge openings imposed an added restriction which further reduced air flow. The original air inlet opening area was increased 15 percent and an auxiliary air inlet, which increased the inlet area an additional 40 percent was provided to offset some of the restrictions, but the discharge opening area could not be increased. The installation of a high efficiency exhaust silencer increased the exhaust silencer surface area 200 percent. The exhaust silencer was subsequently insulated in an effort to reduce the added radiant heat within the set enclosure. In order to establish a better understanding of the diametric effect that some of the noise reduction modifications had on engine cooling, the results of the noise level and high temperature testing will be discussed concurrently in the following paragraphs.

The first 30 kW set to be tested for noise levels after modification was a 60 Hz set (Ser. No. RZ53774). The initial results appeared promising. All noise levels measured at 7-meters were below 70 dBA, with an average of 68.1 dBA for the rated load condition. However, high engine coolant temperatures were encountered during the stabilization period of high temperature testing. The engine coolant temperature reached 220 °F, thus causing the engine to shut-down prior to stabilization. The following efforts were made to correct the problem, however, some of them provided only limited improvement:

- o An auxiliary cooling air inlet cover was removed providing 40 percent more air inlet area. This cover remained off during all further testing. It was left on initially to determine if the added inlet area was needed.
- o The engine cooling fan/water pump speed was increased from 1800 RPM to 2025 RPM by installing the original crankshaft drive pulley.
- o The standard engine cooling fan was replaced with a 9 blade, adjustable pitch plastic fan in conjunction with a new fan shroud. The units was operated with the fan pitch set at 30 degrees and 45 degrees with little noticeable notable effect on cooling.
- o Insulation was placed on all exhaust piping within the enclosure to reduce the amount of radiant heat preheating the cooling air.
- o The ambient temperature was reduced to a point where the unit would stabilize without shutdown for the purpose of determining the magnitude of the cooling problem. It was found that the unit could be stabilized at an ambient temperature of 120 °F with the cooling water discharge temperature at 215 °F and the oil sump at 240 °F indicating that only limited additional modifications would be required.

- o By operating with first the inlet cooling air silencer removed, then with the discharge cooling air silencer removed it was determined that the discharge silencer imposed the greatest air flow restriction.
- o The center panel was removed from the discharge silencer to reduce the restriction. The unit could then be stabilized at 125 °F ambient, operating at rated load. The cooling water discharger temperature was 210 °F and the lubricating oil at the sump was 234 °F at stabilization.
- o Noise level testing was conducted to determine what effect the modifications, which were made to enhance cooling, had on noise levels. It was determined that the noise levels could not be maintained within 70 dbA with the cooling fan operation at 2025 RPM.
- o Numerous noise tests were conducted with various combinations involving the cooling air discharge silencer panels.
- o The combination which appeared to optimize cooling efficiency with noise attenuation required the cooling fan to operate at 1800 RPM, the auxiliary air inlet silencer to be open and the center panel removed from the cooling air discharge silencer. During operation, at rated load in this configuration noise levels averaged 67.9 dbA and the engine coolant temperature stabilized at 215 °F and at 125 °F ambient. With the engine cooling problem corrected high temperature testing was resumed with Set No. 1.

The remaining three sets were also configured in this manner. It was necessary to bypass the high temperature safety switch on Set No. 2 when the set shut down and would not run with the coolant temperature at 212 °F.

The cooling fan shroud was removed from Set No. 2 to investigate the effect on engine cooling. It was found that the shroud was required to prevent overheating.

Set Nos. 2 and 3 completed high temperature testing without engine cooling problems. Set No. 4 developed engine cooling problems during high temperature testing and testing was aborted pending resolution of the engine cooling problems. However, additional problems which are discussed later in this report prevented solution of the cooling problem.

After final modifications to correct cooling problems were made both 60 Hz sets, Sets No. 1 and 2, maintained noise levels within the design goals. Both of the 400 Hz sets, Sets No. 3 and 4, generated noise levels at the cooling fan end of the unit which exceeded design goals by 1.6 dbA and .3 dbA respectively. The higher noise levels are in part due to the increase in engine and cooling fan speed.

When comparing noise levels between the two 400 Hz sets measured both before and after modification, as presented in Figures 7 and 8 a distinct difference can be seen. The noise levels for Set No. 3 averaged 2.9 dbA higher than Set No. 4 before modification, and 1.4 dbA higher after modification. This condition suggests random noise sources which were not greatly affected by the

attenuation effort. One such noise source could be gaps between the doors and frame openings caused by loose fitting latches which could not be tightened and had not been replaced prior to testing.

A complete noise source analysis which has not been conducted would be required to thoroughly investigate the phenomenon.

A comparison of data for the frequency and voltage regulation, stability and transient response tests conducted at various intervals during the program with a given set appears to indicate that some of the results lack repeatability.

Two of the 3 sets, Sets No. 3 and 4 which were subjected to the baseline frequency and voltage regulation, stability and transient response test failed to comply with the voltage regulation requirements.

Set No. 3 continued to exceed the maximum allowable voltage regulation requirements during all subsequent voltage and frequency regulation tests.

Set No. 4 was not subjected to further voltage and frequency tests due to engine cooling, governor, and generator problems. The governor and generator problems will be discussed later in this report.

Set No. 1 was not scheduled for a baseline test. However, this set exceeded the maximum allowable frequency regulation during the short and long term tests, and it exceeded the maximum allowable voltage regulation during the pre and post drop tests.

Set No. 2 complied with all requirements for the voltage and frequency tests each time this test was conducted.

There is no evidence in the data from these tests that would indicate that the modifications which were performed had any effect on performance.

The frequency range of Sets No. 1 and 3 could not be adjusted to the maximum specified value. Set No. 2 was in compliance with all requirements for the test. Set No. 4 was not tested. The adjustment deficiencies could not be corrected by the adjustment devices normally available to the operator. No further diagnostic efforts or adjustments were made.

The lack of adequate frequency adjustment capability on the 60 Hz set was probably due to the fuel stop or control cable being out of adjustment. The 400 Hz sets probably required adjustments to the electronic governor control unit. Improved quality control during the manufacturer's inspection and testing of the sets would probably reduce these problems.

There is no evidence in the data generated during this test which would indicate that the results were in any way influenced by the modifications performed under this program.

Set No. 1 exceeded the maximum allowable trip time during the Circuit Interrupter Overload Test. A probable cause would be an improperly adjusted current sensor.

The circuit interrupter on Set No. 3 required excessive voltage to effect a trip during the overvoltage test and excessive trip time during undervoltage tests. The cause for this problem was not determined. A probable cause could be an improperly adjusted voltage sensor.

The circuit interrupter on Set. No. 4 failed to trip within the maximum allowable time during the overvoltage test. The causes for this problem are unknown. A probable cause could be an improperly adjusted voltage sensor. The type of circuit interrupter problems demonstrated during these tests could be reduced by improved manufacturer quality control inspections and tests.

The only significant influence the modification might have on the circuit interrupter would be an increase in operating temperature. An increase in operating temperature would probably cause the interrupter to trip prematurely rather than late or not at all. There is no conclusive evidence that the circuit interrupter problems, which occurred during these tests, were caused by the modifications made during this program.

There was no abnormal generator winding temperature rise encountered during the testing of Sets No. 1, 2 and 3. This indicated the generators to be cooling properly. There was no manufacturer's data available with which to make resistance value comparisons.

During the Indicating Instrument Test there were seven incidents of panel meters exceeding the maximum allowable accuracy tolerances; three each ammeters, two each wattmeters, and two each volt meters. No attempt was made to calibrate the meters or determine the cause for error. A cause for some of the inaccuracies could be associated with initial calibrations. Improved test and inspection by the manufacturer should reduce the incidence of excessive meter error. There was no data which associated the meter inaccuracies with the modifications which were performed. To the contrary, the reduction in vibration levels resulting from engine/generator mount modifications should enhance the life of the meters which have been traditionally subject to vibration related failures.

The D.C. control voltage of Set No. 3 could not be adjusted. The D.C. control voltage for Sets No. 1 and 2 could not be adjusted to the required 32 volts. The voltage adjustment problems could be the result of regulator damage caused during the reverse polarity portion of the test. The reverse polarity test was conducted with the battery charging alternator connected which caused severe arcing. This situation can be prevented by modifying Test Method 655.1 of MIL-STD-705 to require the battery charging alternator to be disconnected prior to the reverse polarity test.

All of the sets restarted and operated properly after the 5 minute high temperature shutdown. There were no starting problems or erratic engine operation normally associated with high fuel temperatures which could have resulted from the noise attenuation modifications.

Set No. 1 failed to shut down within the specified temperature limit during the overtemperature protective device test, and the fault light failed to indicate a fault condition. The light bulb was tested and found to be working properly. There was no effort made to investigate the cause for the failure to shut down at the specified temperature. Probable causes could be a faulty high temperature shut-down switch or a temperature gradient within the cooling system whereby the coolant at the switch location is cooler than the coolant being monitored leaving the engine. These two points are at opposite ends of the engine. There is no evidence to indicate that the problem was related to any of the modifications which were made.

Sets No. 1 and 2 sustained some minor damage as a result of the drop test. A crack developed in the sheet metal weld on the top right rear corner. The cooling radiator slid down, permitting the fan shroud to contact the fan. The cooling air inlet silencer panels slid forward. The outer muffler insulation wrinkled in several places. The battery rack tray slides and locking pin bent. All of the doors came open. The top panel bent causing some door interference.

Sets 1, 2 and 3 started and operated properly at the conclusion of the test, with the exception of the excessive frequency or voltage regulation noted before and after the test which could not be attributed to the test. Set 4 could not be operated after the test.

Several design changes and modifications were made to prevent recurrence of the damage to the units during this test: Stiffeners were welded to the areas of the sheet metal where the weld cracks developed; More torque was applied to the radiator mounting bolts to prevent sliding; A wider stop bar was added to prevent the silencer panels from sliding forward; An additional support was added to the exhaust system; Nylon blocks, to limit downward travel, were added to the battery rack; and, new door latches were installed, but only after all testing had been completed.

The design changes were made to Sets No. 3 and 4 prior to drop testing. These sets completed drop testing without recurrence of the damages experienced with Sets No. 1 and 2. However, a weld on the cooling air discharge silencer frame on Set No. 3 broke. The weld was found to be faulty, indicating a quality control problem rather than a design deficiency.

Set No. 4 could not be tested for voltage and frequency regulation prior to the drop test because of governor problems. The set would start but not continue to run.

The governor problem was encountered after the Indicating Instrument Test, and during the attempt to start the engine for the Maximum Power Test. The engine would crank but would not start. The fuel system was checked and found not to be at fault. The engine could be started by manually operating the governor control rod. The engine would shut down when the throttle control rod was released. All governor system wiring and connectors were inspected. The frequency potentiometer was adjusted. The engine started, ran for about one minute then shut down. The frequency, gain, and stability potentiometers were

adjusted but the engine would not restart. No further efforts were made to determine the problem. All subsequent tests which required the engine to operate were cancelled.

An attempt was made to start the engine after the drop test. The engine started but was immediately shut down when a loud noise was heard coming from the generator. Metal particles were found in the area of the generator cooling air discharge screen and on the sensor end of the governor magnetic pickup. A bolt could be seen lying on the inside of the screen and the screen was bent at the top as though something had struck it from the inside. The unit was not disassembled for inspection. Consequently, the nature of the failure or extent of the damage is not known. However, certain assumptions can be made. The failure was probably not caused by the drop test as the bolt which was seen lying on the screen was intact and not sheared off as it would have been if the failure was caused by the drop test. The bolt was assumed to be a generator coupling bolt, however, it could have been a spare bolt inadvertently left inside the assembly by the manufacturer. The problem could have been intermittent depending on the random position of the loose bolt or bolts. The problems could have been prevalent while the set was being operated inside the environmental chamber and the noise could not have been heard from the outside. The amount of metal particles found would seem to suggest a longer period of operation rather than just the start-up after the drop test.

The vibration insulation mounts which were installed between the engine/generator assembly as part of the noise attenuation modification had the potential for creating problems during rough handling. They permitted relative movement between the engine/generator assembly and the stationary components of the set which could result in damage upon impact. To minimize this potential, stops were incorporated into the mount design which limit movement of the engine/generator assembly in all directions.

Although the stops were effective to a large degree, some mount related problems were encountered during rail impact testing.

The front engine trunion mount shifted and wedged in a forward position. This mount is designed to be loose and rotate in order to compensate for skid base misalignment which could induce stresses into the engine/generator assembly when it is rigidly mounted.

The mount was modified by installing a locking bolt which prevented the mount from moving when tightened.

The engine cooling fan impacted the shroud, thus bending the shroud. A new shroud which provides more fan to shroud clearance was designed and installed.

A vertical brace and a wider stop bar were installed on the cooling air discharge silencer to prevent the panels from shifting.

New latches were installed to prevent the doors from coming open. These latches should be made from thicker or stronger metal to prevent them from bending during rough handling. The battery tray release latch was found to be

undamaged by testing, however, it did open and close on impact allowing the battery tray to slide forward. A stronger return spring or a lighter handle will be required to prevent the latch from opening on impact.

The test plan did not provide for determining reliability or evaluation of the low coolant sensor, solar charging kits, or the improved fuel filter/water separator. This type of testing would have required more time than the program schedule would permit with the exception of the low coolant sensor.

A radiator draw-down test was conducted on each of the sets. Shut down occurred, with a coolant fault indicated each time the coolant level dropped below the sensor probe.

4. CONCLUSIONS

Test data indicates that all of the modifications which were evaluated by the test program appear in concept to be viable solutions in the areas which they were designed to improve.

Time constraints under which the modification program was performed did not permit design optimization. Consequently, optimum results were not achieved.

Areas in need of further improvement were identified through testing.

Some engine cooling and noise problems continue to exist, however, both of these problems can probably be remedied by improving the design of the cooling and discharge silencer.

5. RECOMMENDATIONS

- o Belvoir should conduct reliability testing to further evaluate the modifications to the 30 kW generator set.
- o Belvoir should correct all deficiencies noted during testing.
- o Belvoir should issue sets for user testing.

APPENDIX A

TEST PLAN FOR IMPROVED 30 kW
DoD GENERATOR SET

TEST PLAN
FOR
SELECTED PERFORMANCE CHARACTERISTICS
OF MIL-DESIGN GENERATOR SETS, 30 KW, DED,
MODIFIED FOR RELIABILITY AND
NOISE ABATEMENT IMPROVEMENT

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REVISION PAGE

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SIGNATURES

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1.0 PURPOSE

The purpose of this test plan is to provide a means for determining selected performance characteristics of 30 KW utility and precise power MIL DESIGN generator sets which have been modified for reliability and noise abatement improvements.

2.0 REFERENCES

- 2.1 VSE Corporation Purchase Order No. 50199 with attached Statement of Work, dated 6 August 1987.
- 2.2 MIL-STD-705
- 2.3 MIL-STD-1474
- 2.4 FEDERAL SPECIFICATION VV-F-800C
- 2.5 MIL-L-2104

3.0 TEST ITEM DESCRIPTION

The test items will be MIL-DESIGN generator sets, as follows:

<u>Quantity</u>	<u>Description</u>
2	30 KW, 60 Hz, DED
2	30 KW, 400 Hz, DED

4.0 INSTRUMENTATION

All instrumentation subject to calibration shall be calibrated against standards traceable to the National Bureau of Standards prior to use.

4.1 Temperature

Temperature measurements of the generator sets shall be made with chromel-alumel and copper constantan thermocouples. Ambient temperatures shall be measured with eight (8) thermocouples wired in parallel to indicate an average ambient temperature. Four (4) of the thermocouples shall be immersed in oil to minimize the effects of thermal transients. Temperatures shall be recorded on a Fluke data logger.

4.2 Pressure

Engine exhaust and intake pressure shall be measured with water filled manometers.

4.3 Electrical Measurements

A Texas Instruments Co. Voltage and Frequency Recorder shall be used to monitor output of the generator sets as required by MIL-STD-705.

5.0 TEST PLAN

5.1 General

Testing shall be conducted in two (2) phases. Phase 1 tests shall be conducted to obtain selected performance characteristics of three (3) generator sets: one, 30 KW 60 Hz; and two, 30 KW 400 Hz in the unmodified configuration. Data obtained shall serve as a baseline for comparison of Phase 2 testing, i.e., of the four (4) engine generator sets in the modified configuration. Specific tests to be conducted in each phase are outlined in paragraph 5.2. All testing per MIL-STD-705 specifying tests to be conducted at all available generator voltage outputs shall be tested on the low voltage output only.

The tests shall be conducted in accordance with the test procedures of MIL-STD-705

Fuel oil used for the tests shall be in accordance with FEDERAL SPECIFICATION VV-F-800C.

Lubricating oil used for the tests shall be in accordance with MIL-L-2104.

5.2 Tests

5.2.1 Phase 1 (Unmodified Configuration)

5.2.1.1 Noise Level Test

The standard generator sets, as listed in paragraph 3.0, shall be subjected to this test. Noise levels shall be measured in accordance with MIL-STD-1474 (Paragraph 5.1).

An open area of uniform grade and free of reflecting surfaces located within 100 feet of either the generator set or microphone shall be used for conducting this test. With the generator set operating under rated load and no load, noise levels shall be measured at nine positions, i.e., 7 meters from the center of each side, 7 meters from the corners of the set and 0.7 meters from the control panel. The microphone shall be positioned 1.2 meters above the ground at each position of measurement. MIL-STD-1474 contours shall be taken at 12 equal (horizontal) arc measurements with one increment including data from the noisiest position.

Maximum noise levels at positions from the center of each side and the corners shall not exceed 70 dBA; from the control panel, 85 dBA.

5.2.1.2 Frequency and Voltage Regulation, Stability and Transient Response Test (Short Term) - Method 710.1(f) 608.1, MIL-STD-705

One (1) 30 KW, 60 Hz and two (2) 30 KW, 400 Hz generator sets shall be subjected to this test. A Texas Instruments Co. model PDR shall be used for recording the voltage and frequency throughout the test. The sets shall be operated at rated load, speed and voltage until stabilized conditions are achieved. Load changes from no load to 4/4, 3/4, 2/4, 1/4, and 4/4 shall be made with the recording chart speed at 12 in/min. Data shall be simultaneously recorded on data sheets at each of the respective load conditions.

5.2.2 Phase 2 (Modified Configuration)

The four (4) generator sets listed in paragraph 3.0 with modifications for improvements in noise abatement and reliability shall undergo the tests as discussed in the following paragraphs. Performance data obtained from Phase 1 tests shall serve as a comparative basis for evaluating modified configuration performance.

5.2.2.1 Noise Level Test

This test shall be conducted as previously discussed in paragraph 5.2.1.1.

5.2.2.2 High Temperature Test (+125°F) - Method 710.1, MIL-STD-705

Each generator set shall be placed in a high temperature chamber and the electrical, thermal and load instrumentation continuously monitored and recorded throughout the test.

Each generator set shall be started and operated at rated speed, voltage and load until stabilized at +125°F. Stabilization shall be considered achieved when all generator (or Exciter) field, voltage, and current readings remained unchanged for 4 consecutive 10 minute readings. Following stabilization, each generator set shall be subjected to the tests described below.

5.2.2.2.1 Temperature Rise (Winding Resistance) - Method 710.1.3.2 (a)-(e), MIL-STD-705

The cold winding resistance shall be measured with a Shallcross Model 638 Kelvin-Wheatstone bridge or equivalent resistance measuring instrument after a minimum of 12 hours non-operating storage at normal ambient temperature. The hot winding resistance shall be measured immediately after shutdown following

temperature stabilization in accordance with the procedure described in Method 710.1c of MIL-STD-705. The stator windings shall be measured on all four generator sets.

5.2.2.2.2 Regulator Range Test - Method 710.1(f) 511.1, MIL-STD-705

With the generator sets stabilized at rated load, voltage and frequency the required instrument readings shall be recorded. Subsequent to this event, the series of load changes from no load, to rated load, to no load, etc. with corresponding terminal voltage adjustments and instrument readings as specified by the test method shall be conducted.

5.2.2.2.3 Frequency Adjustment Test - Method 710.1(f) 511.2, MIL-STD-705

The generator sets shall be operated at rated load, voltage and frequency until stabilized conditions are achieved, as indicated when four consecutive voltage and current readings of the generator field either remained unchanged or have only minor variations with evident increase or decrease in value after the last load, voltage or frequency adjustment has been made. With stabilization established the only generator set control adjustments made shall be those on the control panel frequency adjust device. The required series of generator set frequency adjustments with corresponding loads and associated instrument readings, as specified by the test method, shall be conducted.

5.2.2.2.4 Circuit Interrupter Test, (Short Circuit) - Method 710.1(f) 512.1, MIL-STD-705

The generator sets shall be operated at rated voltage, frequency and load. Short circuits shall be applied at all possible short circuit conditions through the use of a switch. Prior to closing the short circuiting switch, instrument readings shall be taken as well as calibration traces of load currents and 60 Hz time reference base. An Oscillograph shall be used to record maximum short circuit current and circuit interrupter trip time.

5.2.2.2.5 Circuit Interrupter Test (Overload) - Method 710.1(f) 512.2, MIL-STD-705

The generator sets shall be started, operated and stabilized at rated voltage, frequency and load. After stabilization, 130 percent overload current shall be applied to a phase, independent of the other phases. The above sequence shall be conducted for each phase until all phases have been subjected to the overload. The final condition shall consist of applying overload to all phases simultaneously. Upon application of the overload for each condi-

tion cited, time and instrument readings for circuit interrupter operations shall be obtained. In cases wherein the circuit interrupter fails to open within 15 minutes, the interrupter shall be manually opened. After each overload operation, the generator sets shall be subjected to a 15 minute cooldown at rated current. After completion of the 130 percent overload conditions, the generator sets shall be operated at 110 percent overload current for two hours.

5.2.2.2.6 Circuit Interrupter Test (Over Voltage and Under Voltage) -
Method 710.1(f) 512.3, MIL-STD-705

The generator sets shall be equipped with the required instrumentation and circuitry necessary to perform the over voltage and under voltage circuit interrupter test.

The generator sets shall be started and operated at rated frequency and no load. The over-under voltage supply test circuit shall be adjusted, as required, to perform the over voltage test (Proc. I). The test, with the recording oscillograph operating, will be performed three times.

At the conclusion of the over voltage test, the over-under voltage supply test circuit shall be adjusted, as required to perform the under voltage test (Proc. II). The test with the recording oscillograph operating, shall be performed three times.

5.2.2.2.7 Indicating Instrument Test - Method 710.1(f) 513.2, MIL-STD-705

Each generator set shall be initially operated at no load and rated frequency and all set and master instrument readings for each selector switch position recorded. Generator set frequency shall then be reduced to obtain a set frequency indication at the extreme low end of the instrument's operating range, at which occurrence all generator set and master instrument readings shall be recorded. Following this event, generator set frequency shall be increased to obtain a generator set frequency indication at the extreme high end of the instrument's operating range. All generator set and master instrument readings shall then be recorded. Upon completion of the above series at a no load condition, the complete series shall be conducted at load ratings of 1/4, 1/2, 3/4 and 4/4 load.

5.2.2.2.8 Frequency and Voltage Regulation, Stability and Transient
Response Test (Short Term) - Method 710.1(f) 608.1, MIL-STD-705

A Texas Instrument Co. Model PDR shall be used for recording the voltage and frequency throughout the test. The generator sets shall be operated at rated load, rated speed and voltage until stabilized

conditions have been achieved. Load changes from no load to 4/4, 3/4, 2/4, 1/4 and 4/4 shall be made with the recording chart speed at 12 in/min. The data shall be simultaneously recorded on data sheets at each of the respective load conditions.

5.2.2.2.9 Long-Term Frequency and Voltage Stability -
Method 710.1(f) 608.2, MIL-STD-705

The generator set shall be stabilized at rated load, frequency and voltage as determined by four consecutive voltage and current readings of the exciter field. No further adjustments to the voltage and frequency controls shall be allowed for the remainder of the test. A Texas Instruments Co. Model PDR Voltage and Frequency Recorder shall be used for recording the voltage and frequency during the test. Chart speed shall be 12 in/hr., except where specified.

1. Perform short term stability test at rated load. Chart speed 12 in/min.
2. Operate at rated load for the long term stability period of four hours.
3. Stabilize the set at no load as above.
4. Perform short term stability test at no load. Chart speed 12 in/min.
5. Operate at no load for the long term stability period of four hours.
6. Apply three no load to rated load transients and three rated load to no load transients. Chart speed 12 in/min.

5.2.2.2.10 Voltage Dip and Rise (Rated Load) Test - Method 710.1(f) 619.2
MIL-STD-705

Each generator set shall be stabilized at rated load, voltage and frequency. Voltage and current sensing inputs shall be connected to the high speed oscillograph with the amplitudes of the traces adjusted to minimums of 3.0 and 1.5 inches respectively. The oscillograph speed shall be adjusted such that individual waveform peaks were visible. A 60 Hz timing trace shall be used on the chart for actual chart speed reference.

The following sequence shall be performed three times while recording the voltage and current traces on the oscillograph chart:

- a. The load and field instrumentation shall be read and recorded.
- b. The load shall be reduced to zero in one step.

- c. When the voltage and frequency return to steady-state conditions after the transient period, the load and field instrumentation shall be recorded.
- d. The load shall be reapplied in one step.
- e. After steady-state conditions have been reestablished, the load and field instrumentation shall be recorded.

5.2.2.2.11 DC Control Test - Method 710.1(f) 655.1, MIL-STD-705

Each generator set's batteries shall be disconnected and the sets started with slave batteries and cable. After starting, generator set shall be shut off and slave battery's polarity reversed. An attempt shall be made to start each generator set with the slave batteries' polarity reversed. After proper polarity connection, the generator sets shall be started and operated at rated voltage, frequency and load. During this period oscilloscope wave forms shall be photographically documented and instrument readings recorded. With the generator sets operating at rated load, the slave batteries shall be disconnected, and the load removed and reapplied. The load shall again be removed and reapplied two additional times. After the third time and with the generator set operating at rated load, instrument readings shall be recorded and oscilloscope wave forms photographically documented. Upon completion of above sequence, sequence, the battery charging system voltage shall be adjusted to the maximum specified with the generator set operating at rated load. With the battery charging system so adjusted, the load shall be removed and reapplied three times. After the third time and with the generator set at rated rated load, instrument readings shall be recorded and oscilloscope wave forms photographically documented. Subsequent to the above (battery charging system adjusted to maximum specified), with the generator set at rated load the battery charging system shall be adjusted to the minimum specified and rated load to no load to rated load etc., cycle shall be repeated three times. After the third time and with the generator set at rated load, instrument readings shall be recorded and oscilloscope wave forms photographed.

5.2.2.3 Overtemperature Protective Device Test - Method 515.2, MIL-STD-705

The generator set shall be instrumented, started and operated at rated voltage, frequency and load. The cooling air to the generator set shall be blocked and generator set coolant temperature obtained via an installed thermocouple. The temperature at which the overtemperature protection device activates shall be recorded. When the generator set has a warning alarm device, the temperature at which it activates shall be recorded. Should the generator set not shut down when the temperature exceeds the maximum trip value, the generator set shall be shut down immediately and the test discontinued.

5.2.2.4 Maximum Power Test - Method 640.1, MIL-STD-705

The generator set shall be instrumented and loaded in accordance with method 640.1. The generator set circuit interrupter shall be bypassed. The generator set shall be started and stabilized. The maximum output power of the generator set shall be determined and maintained for two minutes. The actual method and procedure employed shall depend upon the type of generator and engine the generator set is equipped with.

At the end of the two minute test, the load shall be reduced to rated load and the generator set allowed to cool for 10 minutes. The maximum power shall be repeated until three valid sets of data are obtained. The results of the three valid maximum power shall be averaged to determine the observed maximum power value.

5.2.2.5 Drop Test (Ends) - Method 740.3b, MIL-STD-705

The generator set shall be instrumented for measuring load conditions, field voltage, current and ambient temperatures. After instrumentation, the generator set shall be subjected to a voltage and frequency regulation test, method 608.1 (performed at rated load only). Following the voltage and frequency regulation test, one end of the generator set shall be raised and supported by a 2-inch timber placed at right angles to the skids, within 6 inches of the skid frame end. The opposite end shall then be raised to the height specified in the procurement document and released to free fall onto a concrete surface. The raise/free fall cycle shall be executed for a total of six (6) cycles. The above steps shall be repeated for the opposite end. Following the twelve drops (six per end), the generator set shall be visually inspected for damage. Upon completion of the drop test, a voltage and frequency regulation test, method 608.1 (performed at rated load only) shall be performed.

APPENDIX B

TEST DATA FOR THE 30 kW
DoD GENERATOR SET

APPENDIX B

TEST DATA FOR THE 30 kW
DoD GENERATOR SET

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Final Report No. FR555-2140
P.O. No. 50199
Date 29 March 1988

VOLUME IV (Part 1)

TEST DATA AND OPERATORS LOG

FOR

DIESEL ENGINE DRIVEN GENERATOR SETS
30 KW, MEP 005A AND MEP 114A

Gen Set 30 KW 60 Hz

SN KZ 05841

HIGH TEMPERATURE TEST (710.1c)

Regulator Range (511.1)	✓
Frequency Adj. Range (511.2)	✓
Circuit Interrupter (Short Circuit) (512.1)	✓
Circuit Interrupter (Overload Trip) (512.2)	✓
Circuit Interrupter (512.3) (Overvoltage/Undervoltage)	✓
Indicating Instrument (515.2)	*
Freq. and Voltage Regulation Stab. & Trans Response (608.1)	✓
Freq. and Voltage Stability (Long Term) (608.2)	✓
Voltage Dip & Rise (619.2)	✓
DC Control (655.1)	*
Winding Resistance (401.1a)	✓
710.1.3.2h HIGH TEMP START	✓

BASELINE TESTS

SOUND LEVEL MIL STD 1474	*
FREQUENCY AND VOLTAGE REG. (608.1)	✓

AMBIENT TESTS (Cont.)

PRE DROP (608.1)	✓
POST DROP (608.1)	✓

AMBIENT TEMPERATURE TESTS

Winding Resistance (401.1a)	✓
MIL-STD-1474 Sound Level (Modified 608.1)	✓
Drop Test (740.3b)	SLIGHT STRUCTURAL DAMAGE
Max Power (640.1)	✓
Overtemperature Protective Device (515.2)	1

* FAILED TEST

1 TEST NOT PERFORMED, UNIT FAILED
TO SHUT DOWN ON EARLIER OVERTEMP
PROBLEMS. IN ALL CASES UNIT WAS
MANUALLY SHUT DOWN IF TEMP
REACHED 221°F

30 KW 60 Hz
KZ 0 5841

B-4

8-6-87 Checked water OK AS
" oil OK AS
" Batterys OK AS
8-12-87 Running time 80
Station unit oil pressure 60
Station Governor not on unit
8-14-87 Changed voltage to 240V AC
Ran unit at full load AS
9-19-87 1139 → 1206 Ran 5000 hrs 700V
RTM 8.4 → 8.7
9-20-87 1130 hrs
Started unit For 608.1
RTM 9.6
1431 Shut unit down RTM 9.7
1505 Restarted unit RTM 9.7
1515 Shut unit down 9.9
1605 Started unit For stabilization
For 608.1 RTM 10.3
1742 Completed 608.1 and shut
unit down RTM 12.0



ACCOUNT BOOK 12 1/2 IN x 2 1/2 IN.

NO. PAGE	DATE	DESCRIPTION	AMOUNT	DATE	DESCRIPTION	AMOUNT
1	8-6-87	Checked water OK				
2	8-12-87	Running time 80				
3	8-14-87	Changed voltage to 240V AC				
4	9-19-87	Started unit For 608.1				
5	9-20-87	Shut unit down RTM 9.7				
6	9-20-87	Restarted unit RTM 9.7				
7	9-20-87	Shut unit down 9.9				
8	9-20-87	Started unit For stabilization				
9	9-20-87	For 608.1 RTM 10.3				
10	9-20-87	Completed 608.1 and shut unit down RTM 12.0				

BOORUM & PEASE CO. HARTFORD, CT 06103 USA

MADE IN USA

- 21 Dec 1987
REMOVED UNIT FROM USE. *etc*
UNIT HAS NO STATION NAME LOGS. *etc*
22 Dec 1987
1108 STARTED SETTING UNIT UP FOR SOUND *etc*
LOG TEST. *etc*
1130 START UNIT TO POSITION SOUND LOGS. *etc*
TEST. NOTE: CONTROL PANEL LOGS MISSING
DUE WAXES TO HEAD DOWNS OPEN. *etc*
* NOTE: CENTER SECTION OF DISCHARGE BARRIE
IN PLACE. *etc*
1511 SHUT UNIT DOWN TO REMOVED CENTER
SECTION OF DISCHARGE BARRIE. *etc*
1518 START UNIT TO POSITION SOUND LOGS
TEST AT RES TANKS #2, #3 AT 1520
AND 1525. *etc*
1519 SHUT UNIT DOWN END OF TEST *etc*
* NOTE: AHEAD TO START UNIT, INTAKE BARRIE
WAS AT IN PLACE. REMOVED CENTER W/AXES
BARRIE FROM 30 KW/10000 GPM. SET TO
BE RUN ON THIS UNIT. *etc*
- 19 JAN 1988
1710 PLACED UNIT IN CHAMBER SET UP FOR. *etc*
START UNIT AT 1810 CAN START
STABILIZATION FOR SHUT TEEN 608.1. *etc*
1811 DRAPOO LEAD TO ZERO FOR UNIT CAL
DOWNS. COOLANT OUT TEMP 221°F. *etc*
1813 SHUT UNIT DOWN. *etc*
- 20 JAN 1988
0918 START UNIT FOR INDICATING INSTRUMENT *etc*
TEST METHOD 5132 *etc*
0957 START UNIT FOR CURRENT INTERLOCKING *etc*
TEST (SHUT CURRENT) METHOD 5121 *etc*
1033 END OF TEST SHUT UNIT DOWN *etc*

20 Jan. 1988
 1112 START UNIT FOR D.C. CENTRAL TEST
 RECALC 555.1 ON SLING BARBERS
 1131 SHOT UNIT DOWN CALIBER OUT TEST
 2214.
 1134 START UNIT FOR SHOT CIRCUIT TEST
 RECALC 512.3 (OVERSHOOT)
 1946 END OF TEST SHOT UNIT DOWN
 1948

21 Jan. 1988
 RECALC AND RECALC AND SHOT UNIT
 184

21 Jan. 1988
 0840 START UNIT TO STATION FOR SHOT
 RECALC 600.1 AT 1400 LNO
 0933 ABOUT TEST EQUIPMENT MALFUNCTION.
 0937 RECALC STATION FOR SHOT RECALC
 1030 END OF TEST SHOT UNIT DOWN
 1057 START UNIT FOR SHOT UNIT DOWN
 TEST (CALC) RECALC 570.2
 1400 LNO - START STATION.
 1519 END OF TEST SHOT UNIT DOWN
 1524 START UNIT AT 1400 LNO FOR
 RECALC 570.2
 1600 END OF TEST SHOT UNIT DOWN
 1613 START UNIT AT 1400 LNO FOR
 RECALC RANGE TEST. RECALC 511.1
 1617 START STATION
 1720 END OF TEST
 1703 START STATION FOR RECALC RANGE
 TEST. RECALC 511.2
 1741 END OF TEST SHOT UNIT DOWN
 1805 START UNIT FOR SHOT UNIT DOWN
 RECALC RANGE TEST.
 1808 START UNIT DOWN TO RECALC RANGE
 TEST.
 1811

22 JAN 1980

TEST START UNIT NO LOAD

100% START UNIT DOWN OPERATING NORMALLY

7

RL

RL

23 JAN 1980

CASE START UNIT AT LOAD CASE FOR

LONG TERM COOL

* NOTE: ADDED / amount of oil before

STARTING UNIT.

100% END OF TEST START UNIT DOWN

25 JAN 1980

CASE START UNIT AT LOAD CASE FOR

MAXIMUM TEST.

CASE START STABILIZATION

100% END OF TEST

100% START STABILIZATION FOR MAXIMUM TEST

CASE

100% END OF TEST START UNIT DOWN.

100% PERFORMED DROP TESTS

DAMAGE

DISCHARGE BUFFLES MISPLACED (NO ATTENTION)

DAMAGE TO BUFFLE HOUSING

RIGHT TEST DOOR OPENED EVERY 10 MINUTES

LEFT TEST DOOR OPENED EVERY 10 MINUTES

CONTROL PANEL DOORS OPENED ON ALL

CONTROL END. DROP

SLIGHT DISTORTION OF BOTH FORWARD &

REAR ROOF

INLET BATTLE SCREEN DAMAGED

REINSTALLED UNIT IN TEST SET UP

FOR POST TEST

NOTE: FANNO CIRCUIT INTERRUPTER LIST

DID NOT WORK AFTER DROP

TEST. BATTLE START LIST

30th May

Hour Meter: 3.4

TERMIN:

79.574

2/E

Se. 982

DATED

[illegible]

1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".

1



DATE	TIME	MICROPHONE POSITION	DISTANCE (FEET)	DBA	REMARKS
	1200	1	27-11	85	
		2	25-3		
		3	13-9		
		4	12-5		
		5	23-9		
		6	30-7		
		7	24-6		
		8	31-6		
		9	19-6		
		10	18-6		
		11	13-11		
	1206	12	23-9		

12 in. x 12 in. (approx)
array diameter for this array
@ 12 in. dia. the distance
between microphones was
10 in. (approx) or less
The array was used at 12/1/68

B-12

DATE: 22 Dec 87

B-13

DATE: 22 Oct 87
TEST ITEM OPERATOR:

8-14

ACOUSTICAL TEST DATA

TEST ITEM: <i>DKW/60 Hz Gen. Set</i>		STATION:		TIME: <i>1434</i>		DATE: <i>28 Dec 1987</i>	
RFG MODEL NO: <i>MAP 0054</i>		SERIAL NO: <i>K20 5841</i>		TEST CONDUCTED BY: <i>Ka GC</i>		TEST ITEM OPERATOR:	
TEMPERATURE: <i>47 of</i>		HUMIDITY: <i>53%</i>		TEST ITEM CONDITION: <i>MODIFIED</i>		NO LOAD	
BAROMETRIC PRESSURE:		SKY COVER:		SURFACE: <i>Grass</i>		SEA STATE: TERRAIN:	
29.719		OVERCAST		STATIONARY OPERATION:		HIGHWAY DRIVING:	
WIND DIRECTION: <i>NE</i>		WIND VELOCITY: <i>25 MPH</i>		MICROPHONE: <i>GR 1962</i>		SOUND LEVEL METER:	
INTERIOR: <input type="checkbox"/>		EXTERIOR: <input checked="" type="checkbox"/>		MICROPHONE LOCATION:		TAPE RECORDER:	
						TAPE NO:	

	dB A	dB B	dB C	ALL PASS	30.5	43	125	250	500	1,000	2,000	4000	8000	REMARKS
<i>Passes</i>														
1	63.5	70.5	74.4	80.9	63.6	68.6	70.7	66.5	62.5	55.9	53.5	49.3	43.4	
2	65.5	71.5	75.2	75.4	64.1	70.1	71.5	68.6	64.6	57.5	57.8	53.6	46.3	
3	68.5	77.2	80.3	81.1	64.2	71.5	79.9	70.5	63.9	57.3	58.1	54.6	45.9	
4	67.3	75.3	78.6	79.3	61.2	68.9	77.5	71.4	63.5	58.1	56.7	52.1	45.9	
5	66.1	73.8	77.2	77.6	59.9	66.3	75.3	70.6	65.4	57.5	57.6	47.2	45.9	
6	67.2	75.3	78.3	78.7	58.9	66.5	77.2	70.5	64.9	56.9	54.6	50.0	45.3	
7	65.6	74.5	78.9	79.4	59.9	72.6	76.5	68.1	63.0	57.3	55.4	51.9	41.2	
8	64.5	71.1	74.9	77.9	59.1	71.2	73.1	66.7	62.1	57.2	58.9	51.1	43.4	
9	77.5	87.1	92.3	91.2	73.4	81.5	89.6	81.0	75.1	73.1	70.6	67.1	63.7	

TEST DATA

REF. NO. MIL-STD 705 Para. 608.1

SHEET 1 OF 2

DATE 29 Sept 1987

JOB NO. 555-2140

PROJ. ENGR.

MAS

ITEM 30 KW, 60 HZ

GENERATOR SET

National Scientific Testing Division

Technical Services P.O. Box 38

Systems Group Hartwood, Virginia 22471

Frequency and Voltage Tel: 703 752 5300

MODEL NO. MEP 015A

SERIAL NO. KEO 5841

Regulation, Stability and Transient Response Test RECORDER/OBSERVER HEH/CWG

(Short Term)

(Short Term)																			
INST TIME	STEP NO.	LOAD STEP	VOLTAGE X1			AMPERES X40			KILOWATTS X40			POWER FACTOR	FREQ. Hz	EXCITER		FIELD AMPS DCA	AMB. TEMP. °F		
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw			VOLTS VDC	VOLTS				
1628			APPLIED RATED LOAD - START																
1638	START	4/4	119	120	120	2.50	2.52	2.52	0.241	0.241	0.241	0.80	60.2	8.4	8.4	3.36	84		
1648	START	4/4	119	120	120	2.51	2.51	2.51	0.242	0.242	0.242	0.80	60.2	8.5	8.5	3.36	85		
1658	START	4/4	119	120	120	2.51	2.51	2.51	0.241	0.243	0.244	0.80	60.2	8.5	8.5	3.36	87		
1708	START	4/4	119	120	120	2.51	2.52	2.52	0.241	0.244	0.245	0.80	60.2	8.9	8.9	3.36	80		
1710			BEGIN LOAD CYCLE																
1710	1	1/4	119	120	120	2.52	2.51	2.52	0.241	0.243	0.244	0.80	60.2	8.4	8.4	3.40			
	2	0	120	120	120	0	0	0	0	0	0	NA	60.4	3.6	3.6	1.41			
	3	3/4	119	120	120	2.53	2.52	2.53	0.242	0.244	0.244	0.80	60.2	8.5	8.5	3.36			
	4	0	120	120	120	0	0	0	0	0	0	NA	60.4	3.6	3.6	1.45			
	5	4/4	119	120	120	2.52	2.52	2.52	0.242	0.243	0.245	0.80	60.2	8.4	8.4	3.40			
	6	0	120	120	120	0	0	0	0	0	0	NA	60.4	3.4	3.4	1.40			
	7	4/4	119	120	120	2.53	2.52	2.53	0.242	0.243	0.244	0.80	60.2	8.4	8.4	3.40			
	8	0	120	120	120	0	0	0	0	0	0	NA	60.4	3.4	3.4	1.40			
	9	3/4	119	120	120	1.91	1.92	1.92	0.186	0.187	0.187	0.80	60.2	6.9	6.9	2.80			
	10	0	120	121	121	0	0	0	0	0	0	NA	61.4	3.4	3.4	1.30			
	11	3/4	119	120	120	1.91	1.91	1.92	0.185	0.186	0.187	0.81	60.5	6.9	6.9	2.80			
	12	0	120	120.5	120.5	0	0	0	0	0	0	NA	61.4	3.4	3.4	1.40			
	13	3/4	119	120	120	1.91	1.92	1.92	0.185	0.187	0.187	0.80	60.5	6.8	6.8	2.76			
	14	0	120	120.5	120.5	0	0	0	0	0	0	NA	61.4	3.4	3.4	1.36			
	15	3/4	119	120	120	1.32	1.33	1.33	0.126	0.127	0.127	0.79	60.7	5.8	5.8	2.30			
	16	0	120	120.5	120.5	0	0	0	0	0	0	NA	61.4	3.4	3.4	1.40			
	17	3/4	120	120	120	1.33	1.33	1.33	0.127	0.127	0.127	0.79	60.7	5.8	5.8	2.30			
	18	0	120	120	120	0	0	0	0	0	0	NA	61.4	3.3	3.3	1.30			
	19	3/4	119.5	120	120	1.34	1.34	1.34	0.126	0.127	0.127	0.79	60.7	5.8	5.8	2.30			
	20	0	120	120.5	120.5	0	0	0	0	0	0	NA	61.3	3.3	3.3	1.30			

NOTES:

REF. NO. MIL-STD 705 Para. 608.1
 SHEET 2 OF 2
 DATE 29 Sept 1987
 JOB NO. 555-2140
 PROJ. ENGR.

ITEM 30KW, 60 Hz
 GENERATOR SET
 MFR. JOHN B. HOSKINGSWORTH
 MODEL NO. MEP 005A
 SERIAL NO. K20 5841

National Technical Systems
 Scientific Services Group
 Testing Division
 P.O. Box 38
 Harlow, Virginia 22471
 Tel: 703 752 5300

TEST DATA

INST TIME	STEP NO.	LOAD STEP	VOLTAGE X1			AMPERES X40			KILOWATTS X40						POWER FACTOR PF	FREQ. Hz	EXCITER		AMB. TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw	L1-L0 Kva	L2-L0 Kva	L3-L0 Kva			VOLTS VDC	FIELD DCA	
*	21	1/4	119	120	120	0.16	0.12	0.13	0.018	0.018	0.018	0.018	0.018	0.018	NA	61.3	3.3	1.30	
*	22	0	120.5	120	120.5	0.33	0.32	0.33	0.031	0.030	0.032	0.031	0.030	0.032	0.79	60.9	4.5	1.80	
*	23	1/4	120	120	120	0.33	0.32	0.33	0.031	0.030	0.032	0.031	0.030	0.032	0.79	61.3	3.3	1.30	
	24	0	120	120	120	0.32	0.32	0.33	0.032	0.032	0.032	0.032	0.032	0.032	0.79	60.9	4.6	1.80	
	25	1/4	120	120	120	0.32	0.33	0.33	0.031	0.031	0.031	0.031	0.031	0.031	0.79	61.3	3.2	1.30	
	26	0	120	120	120.5	0.32	0.32	0.33	0.031	0.031	0.031	0.031	0.031	0.031	0.79	60.9	4.5	1.80	
	27	1/4	119	119.5	119.5	2.54	2.53	2.53	0.243	0.243	0.244	0.243	0.243	0.244	0.80	60.1	8.0	3.20	
	28	0	120	120	120.5	2.54	2.53	2.53	0.243	0.243	0.244	0.243	0.243	0.244	0.80	61.3	3.2	1.30	
	29	1/4	119	120	119.5	2.52	2.52	2.52	0.243	0.243	0.243	0.243	0.243	0.243	0.80	60.0	8.1	3.20	
	30	0	120	121	120.5	2.53	2.53	2.53	0.243	0.243	0.243	0.243	0.243	0.243	0.80	61.4	3.2	1.30	
	31	1/4	119	120	119.5	2.53	2.52	2.53	0.244	0.244	0.245	0.244	0.244	0.245	0.80	60.1	8.1	3.20	
	32	0	120	120.5	120.5	2.53	2.53	2.53	0.244	0.244	0.245	0.244	0.244	0.245	0.80	61.4	3.3	1.30	
1742	END OF TEST														NA				

* Last Five IN Load Bank, Repeat Steps 20 & 21 *

NOTES:

TEST DATA

ITEM 30 Kw 160 Hz
GENERATOR SET**NTS**REF. NO. MIL-STD 705SHEET 1 OF 3

MFR. JOHN R. HOLKINSWORTH
 MODEL NO. MEP005A
 SERIAL NO. K30 5841

National
 Technical
 Systems

Scientific
 Services
 Group
 Harwood, Virginia 22471
 Tel: 703 752 5300

Testing Division

P.O. Box 38

Harwood, Virginia 22471

Tel: 703 752 5300

FREQUENCY AND VOLTAGE

PROJ. ENGR.

REGULATION, STABILITY, AND TRANSIENT RESPONSE

RECORDER/OBSERVER G. CARTER

TEST (SHORT TERM)

LOAD STEP	FREQUENCY			CONSTANT LOAD			REGULATION		MAXIMUM EXCURSION		VOLTAGE		REC.		CONSTANT LOAD	
	EXCURSION			BANDWIDTH			FREQ.		OVERSHOOT		UNDERSHOOT		TIME		BANDWIDTH	
	OVERSHOOT HZ	UNDERSHOOT HZ	TIME SEC.	HZ	SEC.	VOLT	SEC.	VOLT	VOLT	VOLT	VOLT	SEC.	SEC.	VOLT	SEC.	VOLT
1				.155	.250											.17
1-2	1.2	2.0	.15	.155	.250		.33	0	4.1	3.4			.31			.17
2				.105	.175		.33	0								.255
2-3			.78	.17	.283		.33	0			1.4	1.16	.31			.255
3			.46	.105	.175		.33	0	4.1	3.4			.39			.255
3-4	1.2	2.0	.78	.12	.20		.33	0			2.6	2.16	.39			.255
4			.46	.105	.175		.33	0					.31			.255
4-5			.78	.12	.20		.33	0	4.5	3.8			.31			.255
5			.46	.105	.175		.33	0			2.6	2.16	.31			.255
5-6	1.2	2.0	.78	.17	.283		.33	0					.23			.255
6			.46	.12	.20		.33	0	3.4	2.8			.23			.255
6-7			.78	.17	.283		.33	0			1.7	1.4	.23			.255
7			.46	.12	.20		.33	0					.23			.255
7-8	1.2	2.0	.78	.17	.283		.33	0					.23			.255
8			.46	.12	.20		.33	0					.23			.255
8-9			1.0	.17	.283		.33	0			1.7	1.4	.23			.255
9			.55	.105	.175		1.33	.83	2.2	1.8			.23			.255
9-10	.83	1.38	.55	.12	.20		1.5	.41			1.4	1.2	.23			.255
10			.55	.105	.175		1.5	.41					.23			.255
10-11			.55	.12	.20		1.5	.41	2.2	1.8			.23			.255
11			.55	.105	.175		1.5	.41					.23			.255
11-12	.86	1.4	.55	.12	.20		1.5	.41	2.2	1.8			.23			.255
12			.70	.105	.175		1.5	.41			1.5	1.3	.15			.255
12-13			.46	.14	.233		1.5	.41					.23			.255
13			.46	.14	.233		1.5	.41	2.4	2.0			.23			.255
13-14	.86	1.4	.46	.14	.233		1.5	.41					.23			.255

NOTES:

TEST DATA

ITEM 30KW 60Hz
GENERATOR SET

MTS

REF. NO. MIL STD 705

SHEET 2 OF 3

MFR. JOHN R HALLINGSWORTH

National Technical Systems
Scientific Services Group
Testing Division
P.O. Box 38
Haltwood, Virginia 22471

DATE 13 Oct 1987

MODEL NO. MFP 005A

FREQUENCY AND VOLTAGE
Tel: 703 752 5300

JOB NO. 555-2140

PROJ. ENGR.

SERIAL NO. K20 5841

REGULATION, STABILITY, AND TRANSIENT RESPONSE

RECORDER/OBSERVER G CARTER

TEST (SHORT TERM)

LOAD STEP	FREQUENCY				VOLTAGE				CONSTANT LOAD	
	MAXIMUM EXCURSION		REGULATION		MAXIMUM EXCURSION		UNDERSHOOT		TIME	
	OVERSHOOT Hz	UNDERSHOOT Hz	FREQ. Hz	VOLT V	OVERSHOOT V	UNDERSHOOT V	VOLT V	SEC.	BANDWIDTH V	CONSTANT LOAD BANDWIDTH V
14			.105	.087						
14-15		.65	1.1	.39						
15			.12	.10						
15-16	.55	.72	1.16	.41	1.7	1.4				
16			.12	.10						
16-17		.62	1.16	.41						
17			.12	.10						
17-18	.58	.96	1.16	0	1.5	1.2				
18			.105	.087						
18-19		.76	1.16	0						
19			.105	.087						
19-20	.41	.68	1.0	.41	1.7	1.4				
20			.105	.087						
20-21		.55	.66	.41						
21			.105	.087						
21-22	.41	.68	.66	0	.68	.56				
22			.105	.087						
22-23		.31	.66	0						
23			.105	.087						
23-24	.37	.62	.66	0	.68	.56				
24			.105	.087						
24-25		.24	.66	0						
25			.14	.116						
25-26	.27	.45	.66	0	.68	.56				
26			.14	.116						
26-27		1.3	2.0	.41						

NOTES:

TEST DATA

ITEM 30 Kw / 60 Hz
GENERATOR SET**NTS**REF. NO. ML-STD 705SHEET 3 OF 3DATE 13 OCT. 1987MFR. JOHN R. HOLLINGSWORTHJOB NO. 555-2140MODEL NO. MFP 005A

PROJ. ENGR.

SERIAL NO. K20 5841RECORDER/OBSERVER G. CARTERNational Technical Systems
Scientific Services Group
Testing Division
P.O. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

FREQUENCY AND VOLTAGE

REGULATION, STABILITY, AND TRANSIENT RESPONSE

TEST (SHORT TERM)

FREQUENCY															VOLTAGE									
LOAD STEP		MAXIMUM EXCURSION		REC.		CONSTANT LOAD		REGULATION		MAXIMUM EXCURSION		UNDERSHOOT		REC.		CONSTANT LOAD								
		OVERSHOOT	HZ	TIME	SEC.	HZ	BANDWIDTH	FREQ.	VOLT	VOLT	H	VOLT	H	TIME	SEC.	VOLT	BANDWIDTH							
27																								
27	1.1	1.8			.39	.155	.258	2.0	.83		4.5	3.7			.23	.255	.212							
28					.70	.155	.258	2.16	.83							.255	.212							
28-29	1.4	2.5				.155	.258	2.33	.83		4.8	4.0		2.9	.31	.17	.141							
29					.39																			
29-30	1.2	2.0			.70	.155	.258	2.16	.83					2.9	.23	.255	.212							
30																								
30-31	1.3	2.2				.155	.258	2.16	.83															
31					.46																			
31-32	1.1	1.8				.105	.175	2.16	.83		4.1	3.4			.31	.255	.212							
32																								

NOTES:

TEST DATA

REF. NO. MIL-STD 705; 513.2
SHEET 2 OF 2
DATE 20 JAN 1988
JOB NO. 555-2140
PROJ. ENGR.
RECORDER/OBSERVER BT

ITEM 30 Kw / 60 Hz
GENERATOR SET
MODIFIED
MFG. JOHN R. HOLLINGSWORTH
MODEL NO. MGP 005A
SERIAL NO. K20 5891

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

INDICATING INSTRUMENT TEST (ELECTRICAL)

PANEL INSTRUMENTS

INST TIME	LOAD STEP NO.	VOLTAGE			AMPERES			KILOWATTS			POWER FACTOR PF	FREQ. Hz	2 LOAD		AMB. TEMP °F
		L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0			L1-L0	L2-L0	
		VAC	VAC	VAC	AC AMPS	AC AMPS	AC AMPS	Kw	Kw	Kw					
0915		ZEROED POWER METER													
0918		START CALIB C ALL													
0925	NIL	120	120	120	0	0	0	NA	NA	NA	NA	60	0	0	123
0927	NIL	120	120	120	0	0	0	NA	NA	NA	NA	57	0	0	123
0929	NIL	120	120	120	0	0	0	NA	NA	NA	NA	62	0	0	124
0931	1/4	120	120	120	24	48	24	NA	NA	NA	NA	60	24	24	125
0932	1/2	120	120	120	48	96	48	NA	NA	NA	NA	60	55	55	125
0934	3/4	120	120	120	73	71	71	NA	NA	NA	NA	60	83	83	126
0936	4/4	120	120	120	90	95	95	NA	NA	NA	NA	60	110	110	125
0937		END OF TEST CALIB													

B-24

NOTES:

NTS

**National
Technical
Systems**

**Scientific
Services
Group**

Testing Division
P.O. Box 38

Hartwood, Virginia 22471

Tel: 703 752 5300

Panel Instrument Test

Method 513.2 (Computation Results)

ITEM 30 HW 60 Hz

GENERATOR SET

Modified

MFGR. JOHN R. HOLMES WINTH

MODEL NO. MEP 005A

SERIAL NO. K205841

[illegible]

LI-LI OMMS : 911 AMPS CON AT RATED LOAD - MAX ALLOWABLE = 6% OF FULL SCALE OR 8.3 AMPS

• 2.1.1.1.1

INDICATING INSTRUMENTS 513.2

BEGIN SCAN GROUP 1 20 JAN 88 09:25:32
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	339.84	DEG.	F
C	2	EXHAUST 2	325.43	DEG.	F
C	3	EXHAUST 3	344.70	DEG.	F
C	4	EXHAUST 4	367.22	DEG.	F
C	5	EXHAUST 5	361.78	DEG.	F
C	6	EXHAUST 6	320.06	DEG.	F
C	7	ENG. COOL. IN	143.76	DEG.	F
C	8	ENG. COOL. OUT	176.91	DEG.	F
C	9	OIL SUMP	152.16	DEG.	F
C	10	OIL GALLERY	154.42	DEG.	F
C	13	ENG. INTAKE	125.22	DEG.	F
C	14	RAD. TOP LEFT	143.84	DEG.	F
C	15	RAD. BTM LEFT	142.14	DEG.	F
C	16	RAD. TOP RIGHT	140.27	DEG.	F
C	17	RAD. BTM RIGHT	117.61	DEG.	F
C	18	GEN. AIR IN	103.82	DEG.	F
C	19	GEN. AIR OUT	117.05	DEG.	F
C	20	GEN. FRAME TOP	101.71	DEG.	F
C	21	GEN. FRAME BTM	96.989	DEG.	F
C	22	GEN. EXCITER	115.63	DEG.	F
C	23	GEN. VOLT. REG.	97.643	DEG.	F
C	24	CONTROL PANEL	103.66	DEG.	F
C	25	RELAY AREA	119.99	DEG.	F
C	26	BATTERY LEFT	111.20	DEG.	F
C	27	BATTERY RIGHT	106.78	DEG.	F
C	28	AIR IN SET	123.76	DEG.	F
C	29	FUEL TANK	81.710	DEG.	F
C	30	FUEL OUTLET	103.81	DEG.	F

END SCAN GROUP 1 20 JAN 88 09:25:42

STOPPED SINGLE SCAN 20 JAN 88 09:25:42

BEGIN SCAN GROUP 1 20 JAN 88 09:27:06
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	326.63	DEG.	F
C	2	EXHAUST 2	320.44	DEG.	F
C	3	EXHAUST 3	335.60	DEG.	F
C	4	EXHAUST 4	343.98	DEG.	F
C	5	EXHAUST 5	350.23	DEG.	F
C	6	EXHAUST 6	317.61	DEG.	F
C	7	ENG. COOL. IN	166.00	DEG.	F
C	8	ENG. COOL. OUT	181.32	DEG.	F
C	9	OIL SUMP	160.48	DEG.	F
C	10	OIL GALLERY	162.24	DEG.	F
C	13	ENG. INTAKE	130.24	DEG.	F
C	14	RAD. TOP LEFT	152.41	DEG.	F
C	15	RAD. BTM LEFT	149.70	DEG.	F
C	16	RAD. TOP RIGHT	148.29	DEG.	F
C	17	RAD. BTM RIGHT	123.75	DEG.	F
C	18	GEN. AIR IN	105.98	DEG.	F
C	19	GEN. AIR OUT	121.31	DEG.	F
C	20	GEN. FRAME TOP	104.09	DEG.	F
C	21	GEN. FRAME BTM	99.036	DEG.	F
C	22	GEN. EXCITER	119.45	DEG.	F
C	23	GEN. VOLT. REG.	99.509	DEG.	F
C	24	CONTROL PANEL	105.97	DEG.	F
C	25	RELAY AREA	120.51	DEG.	F
C	26	BATTERY LEFT	118.03	DEG.	F
C	27	BATTERY RIGHT	113.12	DEG.	F
C	28	AIR IN SET	123.87	DEG.	F
C	29	FUEL TANK	82.051	DEG.	F
C	30	FUEL OUTLET	100.03	DEG.	F

END SCAN GROUP 1 20 JAN 88 09:27:17

STOPPED SINGLE SCAN 20 JAN 88 09:27:17

BEGIN SCAN GROUP 1 20 JAN 88 09:29:00
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	332.74	DEG.	F
C	2	EXHAUST 2	321.02	DEG.	F
C	3	EXHAUST 3	335.56	DEG.	F
C	4	EXHAUST 4	376.55	DEG.	F
C	5	EXHAUST 5	386.07	DEG.	F
C	6	EXHAUST 6	330.64	DEG.	F
C	7	ENG. COOL. IN	172.97	DEG.	F
C	8	ENG. COOL. OUT	183.73	DEG.	F
C	9	OIL SUMP	169.05	DEG.	F
C	10	OIL GALLERY	170.89	DEG.	F
C	13	ENG. INTAKE	129.25	DEG.	F
C	14	RAD. TOP LEFT	143.49	DEG.	F
C	15	RAD. BTM LEFT	137.72	DEG.	F
C	16	RAD. TOP RIGHT	137.24	DEG.	F
C	17	RAD. BTM RIGHT	121.36	DEG.	F
C	18	GEN. AIR IN	121.24	DEG.	F
C	19	GEN. AIR OUT	113.65	DEG.	F
C	20	GEN. FRAME TOP	106.59	DEG.	F
C	21	GEN. FRAME BTM	102.55	DEG.	F
C	22	GEN. EXCITER	124.80	DEG.	F
C	23	GEN. VOLT. REG.	101.90	DEG.	F
C	24	CONTROL PANEL	109.13	DEG.	F
C	25	RELAY AREA	120.66	DEG.	F
C	26	BATTERY LEFT	125.51	DEG.	F
C	27	BATTERY RIGHT	119.85	DEG.	F
C	28	AIR IN SET	124.14	DEG.	F
C	29	FUEL TANK	82.138	DEG.	F
C	30	FUEL OUTLET	113.69	DEG.	F

END SCAN GROUP 1 20 JAN 88 09:29:09

STOPPED SINGLE SCAN 20 JAN 88 09:29:09

BEGIN SCAN GROUP 1 20 JAN 88 09:31:10
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	445.20	DEG.	F
C	2	EXHAUST 2	409.10	DEG.	F
C	3	EXHAUST 3	416.56	DEG.	F
C	4	EXHAUST 4	429.44	DEG.	F
C	5	EXHAUST 5	456.04	DEG.	F
C	6	EXHAUST 6	409.13	DEG.	F
C	7	ENG. COOL. IN	173.49	DEG.	F
C	8	ENG. COOL. OUT	184.57	DEG.	F
C	9	OIL SUMP	177.39	DEG.	F
C	10	OIL GALLERY	178.82	DEG.	F
C	13	ENG. INTAKE	120.05	DEG.	F
C	14	RAD. TOP LEFT	143.89	DEG.	F
C	15	RAD. BTM LEFT	137.28	DEG.	F
C	16	RAD. TOP RIGHT	137.50	DEG.	F
C	17	RAD. BTM RIGHT	122.11	DEG.	F
C	18	GEN. AIR IN	122.89	DEG.	F
C	19	GEN. AIR OUT	116.00	DEG.	F
C	20	GEN. FRAME TOP	110.36	DEG.	F
C	21	GEN. FRAME BTM	107.46	DEG.	F
C	22	GEN. EXCITER	129.13	DEG.	F
C	23	GEN. VOLT. REG.	104.44	DEG.	F
C	24	CONTROL PANEL	111.70	DEG.	F
C	25	RELAY AREA	121.47	DEG.	F
C	26	BATTERY LEFT	128.62	DEG.	F
C	27	BATTERY RIGHT	122.23	DEG.	F
C	28	AIR IN SET	125.60	DEG.	F
C	29	FUEL TANK	82.256	DEG.	F
C	30	FUEL OUTLET	119.30	DEG.	F

END SCAN GROUP 1 20 JAN 88 09:31:19

STOPPED SINGLE SCAN 20 JAN 88 09:31:19

BEGIN SCAN GROUP 1 20 JAN 88 09:32:51
30 KW/60 HZ GEN SET S/N K20 5841

C	1 EXHAUST 1	558.19 DEG.	F
C	2 EXHAUST 2	512.86 DEG.	F
C	3 EXHAUST 3	587.17 DEG.	F
C	4 EXHAUST 4	522.78 DEG.	F
C	5 EXHAUST 5	559.87 DEG.	F
C	6 EXHAUST 6	582.17 DEG.	F
C	7 ENG. COOL. IN	175.99 DEG.	F
C	8 ENG. COOL. OUT	186.42 DEG.	F
C	9 OIL SUMP	182.83 DEG.	F
C	10 OIL GALLERY	184.23 DEG.	F
C	13 ENG. INTAKE	128.58 DEG.	F
C	14 RAD. TOP LEFT	143.95 DEG.	F
C	15 RAD. BTM LEFT	136.48 DEG.	F
C	16 RAD. TOP RIGHT	137.88 DEG.	F
C	17 RAD. BTM RIGHT	123.66 DEG.	F
C	18 GEN. AIR IN	124.37 DEG.	F
C	19 GEN. AIR OUT	118.56 DEG.	F
C	20 GEN. FRAME TOP	112.88 DEG.	F
C	21 GEN. FRAME BTM	118.45 DEG.	F
C	22 GEN. EXCITER	131.83 DEG.	F
C	23 GEN. VOLT. REG.	186.25 DEG.	F
C	24 CONTROL PANEL	113.76 DEG.	F
C	25 RELAY AREA	121.74 DEG.	F
C	26 BATTERY LEFT	129.75 DEG.	F
C	27 BATTERY RIGHT	122.67 DEG.	F
C	28 AIR IN SET	125.36 DEG.	F
C	29 FUEL TANK	82.339 DEG.	F
C	30 FUEL OUTLET	121.71 DEG.	F

END SCAN GROUP 1 20 JAN 88 09:33:00

STOPPED SINGLE SCAN 20 JAN 88 09:33:00

BEGIN SCAN GROUP 1 20 JAN 88 09:34:43
30 KW/60 HZ GEN SET S/N K20 5841

C	1 EXHAUST 1	668.79 DEG.	F
C	2 EXHAUST 2	628.43 DEG.	F
C	3 EXHAUST 3	685.79 DEG.	F
C	4 EXHAUST 4	628.29 DEG.	F
C	5 EXHAUST 5	675.22 DEG.	F
C	6 EXHAUST 6	685.39 DEG.	F
C	7 ENG. COOL. IN	188.86 DEG.	F
C	8 ENG. COOL. OUT	189.52 DEG.	F
C	9 OIL SUMP	188.35 DEG.	F
C	10 OIL GALLERY	189.82 DEG.	F
C	13 ENG. INTAKE	129.58 DEG.	F
C	14 RAD. TOP LEFT	145.66 DEG.	F
C	15 RAD. BTM LEFT	138.22 DEG.	F
C	16 RAD. TOP RIGHT	138.78 DEG.	F
C	17 RAD. BTM RIGHT	124.43 DEG.	F
C	18 GEN. AIR IN	124.85 DEG.	F
C	19 GEN. AIR OUT	128.17 DEG.	F
C	20 GEN. FRAME TOP	115.58 DEG.	F
C	21 GEN. FRAME BTM	113.42 DEG.	F
C	22 GEN. EXCITER	134.65 DEG.	F
C	23 GEN. VOLT. REG.	188.25 DEG.	F
C	24 CONTROL PANEL	116.89 DEG.	F
C	25 RELAY AREA	122.82 DEG.	F
C	26 BATTERY LEFT	138.22 DEG.	F
C	27 BATTERY RIGHT	122.12 DEG.	F
C	28 AIR IN SET	126.81 DEG.	F
C	29 FUEL TANK	82.577 DEG.	F
C	30 FUEL OUTLET	124.28 DEG.	F

END SCAN GROUP 1 20 JAN 88 09:34:52

STOPPED SINGLE SCAN 20 JAN 88 09:34:52

BEGIN SCAN GROUP 1 20 JAN 88 09:36:27
30 KW/60 HZ GEN SET S/N K20 5841

C	1 EXHAUST 1	781.64 DEG.	F
C	2 EXHAUST 2	748.84 DEG.	F
C	3 EXHAUST 3	718.69 DEG.	F
C	4 EXHAUST 4	747.86 DEG.	F
C	5 EXHAUST 5	882.28 DEG.	F
C	6 EXHAUST 6	724.19 DEG.	F
C	7 ENG. COOL. IN	186.79 DEG.	F
C	8 ENG. COOL. OUT	194.49 DEG.	F
C	9 OIL SUMP	193.37 DEG.	F
C	10 OIL GALLERY	194.83 DEG.	F
C	13 ENG. INTAKE	131.15 DEG.	F
C	14 RAD. TOP LEFT	149.88 DEG.	F
C	15 RAD. BTM LEFT	141.24 DEG.	F
C	16 RAD. TOP RIGHT	141.15 DEG.	F
C	17 RAD. BTM RIGHT	125.67 DEG.	F
C	18 GEN. AIR IN	124.96 DEG.	F
C	19 GEN. AIR OUT	122.13 DEG.	F
C	20 GEN. FRAME TOP	117.76 DEG.	F
C	21 GEN. FRAME BTM	115.59 DEG.	F
C	22 GEN. EXCITER	135.54 DEG.	F
C	23 GEN. VOLT. REG.	118.88 DEG.	F
C	24 CONTROL PANEL	117.78 DEG.	F
C	25 RELAY AREA	122.38 DEG.	F
C	26 BATTERY LEFT	138.67 DEG.	F
C	27 BATTERY RIGHT	121.64 DEG.	F
C	28 AIR IN SET	125.82 DEG.	F
C	29 FUEL TANK	82.763 DEG.	F
C	30 FUEL OUTLET	125.94 DEG.	F

END SCAN GROUP 1 20 JAN 88 09:36:36

STOPPED SINGLE SCAN 20 JAN 88 09:36:36

TEST DATA

ITEM 30 Kw / 60 Hz

Centralized Set

MODIFIED

IFGR. John L. Hollingsworth

MODEL NO. MEP 005A

SERIAL NO. K20 5811

NTS

**National
Technical
Systems**

**Schenck
Services
Group**

**Testing Division
P.O. Box 38
Hartwood, Virginia**

11/6/77 5/2.1

Circuit INTERVIEWERS:

REF. NO. MIL-STD 705

30 / SHEET

DATE 20 JAN 1985

JOB NO. 555-2140

PROJ. ENCR.

RECORDER/OBSERVER kim/ge

[illegible]

**National
Technical
Systems**

Short Circuit

INTERPRETER TEST (COMPUTATION RESULTS)

RECORDED/OBSERVER

NOTES:

CIRCUIT (RTG EXETER (SMART) 512.1

BEGIN SCAN GROUP 1 20 JAN 88 10:00:42
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	759.81	DEG.	F
C	2	EXHAUST 2	718.85	DEG.	F
C	3	EXHAUST 3	704.88	DEG.	F
C	4	EXHAUST 4	739.69	DEG.	F
C	5	EXHAUST 5	798.61	DEG.	F
C	6	EXHAUST 6	708.15	DEG.	F
C	7	ENG. COOL. IN	187.68	DEG.	F
C	8	ENG. COOL. OUT	195.86	DEG.	F
C	9	OIL SUMP	191.46	DEG.	F
C	10	OIL GALLERY	192.71	DEG.	F
C	13	ENG. INTAKE	139.97	DEG.	F
C	14	RAD. TOP LEFT	151.59	DEG.	F
C	15	RAD. BTM LEFT	144.67	DEG.	F
C	16	RAD. TOP RIGHT	143.71	DEG.	F
C	17	RAD. BTM RIGHT	126.92	DEG.	F
C	18	GEN. AIR IN	123.38	DEG.	F
C	19	GEN. AIR OUT	125.99	DEG.	F
C	20	GEN. FRAME TOP	123.33	DEG.	F
C	21	GEN. FRAME BTM	119.38	DEG.	F
C	22	GEN. EXCITER	135.85	DEG.	F
C	23	GEN. VOLT. REG.	128.24	DEG.	F
C	24	CONTROL PANEL	138.79	DEG.	F
C	25	RELAY AREA	124.72	DEG.	F
C	26	BATTERY LEFT	128.84	DEG.	F
C	27	BATTERY RIGHT	121.96	DEG.	F
C	28	AIR IN SET	125.38	DEG.	F
C	29	FUEL TANK	85.787	DEG.	F
C	30	FUEL OUTLET	137.71	DEG.	F

END SCAN GROUP 1 20 JAN 88 10:00:51

STOPPED SINGLE SCAN 20 JAN 88 10:00:51

BEGIN SCAN GROUP 1 20 JAN 88 10:05:56
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	738.79	DEG.	F
C	2	EXHAUST 2	698.88	DEG.	F
C	3	EXHAUST 3	677.62	DEG.	F
C	4	EXHAUST 4	787.65	DEG.	F
C	5	EXHAUST 5	768.18	DEG.	F
C	6	EXHAUST 6	683.86	DEG.	F
C	7	ENG. COOL. IN	187.84	DEG.	F
C	8	ENG. COOL. OUT	194.65	DEG.	F
C	9	OIL SUMP	204.45	DEG.	F
C	10	OIL GALLERY	205.24	DEG.	F
C	13	ENG. INTAKE	136.42	DEG.	F
C	14	RAD. TOP LEFT	152.74	DEG.	F
C	15	RAD. BTM LEFT	145.76	DEG.	F
C	16	RAD. TOP RIGHT	145.26	DEG.	F
C	17	RAD. BTM RIGHT	138.88	DEG.	F
C	18	GEN. AIR IN	124.81	DEG.	F
C	19	GEN. AIR OUT	129.41	DEG.	F
C	20	GEN. FRAME TOP	126.88	DEG.	F
C	21	GEN. FRAME BTM	123.28	DEG.	F
C	22	GEN. EXCITER	178.68	DEG.	F

BEGIN SCAN GROUP 1 20 JAN 88 10:10:11
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	734.51	DEG.	F
C	2	EXHAUST 2	695.35	DEG.	F
C	3	EXHAUST 3	677.29	DEG.	F
C	4	EXHAUST 4	719.86	DEG.	F
C	5	EXHAUST 5	778.84	DEG.	F
C	6	EXHAUST 6	693.88	DEG.	F
C	7	ENG. COOL. IN	198.27	DEG.	F
C	8	ENG. COOL. OUT	197.18	DEG.	F
C	9	OIL SUMP	218.29	DEG.	F
C	10	OIL GALLERY	211.63	DEG.	F
C	13	ENG. INTAKE	136.68	DEG.	F
C	14	RAD. TOP LEFT	153.92	DEG.	F
C	15	RAD. BTM LEFT	146.61	DEG.	F
C	16	RAD. TOP RIGHT	146.59	DEG.	F
C	17	RAD. BTM RIGHT	131.95	DEG.	F
C	18	GEN. AIR IN	124.94	DEG.	F
C	19	GEN. AIR OUT	131.56	DEG.	F
C	20	GEN. FRAME TOP	128.98	DEG.	F
C	21	GEN. FRAME BTM	125.35	DEG.	F
C	22	GEN. EXCITER	142.81	DEG.	F
C	23	GEN. VOLT. REG.	138.38	DEG.	F
C	24	CONTROL PANEL	135.84	DEG.	F
C	25	RELAY AREA	126.83	DEG.	F
C	26	BATTERY LEFT	137.51	DEG.	F
C	27	BATTERY RIGHT	125.28	DEG.	F
C	28	AIR IN SET	126.64	DEG.	F
C	29	FUEL TANK	87.668	DEG.	F
C	30	FUEL OUTLET	142.27	DEG.	F

END SCAN GROUP 1 20 JAN 88 10:10:21

STOPPED SINGLE SCAN 20 JAN 88 10:10:21

BEGIN SCAN GROUP 1 20 JAN 88 10:13:57
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	736.27	DEG.	F
C	2	EXHAUST 2	694.57	DEG.	F
C	3	EXHAUST 3	687.15	DEG.	F
C	4	EXHAUST 4	718.63	DEG.	F
C	5	EXHAUST 5	779.36	DEG.	F
C	6	EXHAUST 6	694.35	DEG.	F
C	7	ENG. COOL. IN	191.82	DEG.	F
C	8	ENG. COOL. OUT	198.81	DEG.	F
C	9	OIL SUMP	214.18	DEG.	F
C	10	OIL GALLERY	215.38	DEG.	F
C	13	ENG. INTAKE	136.23	DEG.	F
C	14	RAD. TOP LEFT	154.22	DEG.	F
C	15	RAD. BTM LEFT	146.53	DEG.	F
C	16	RAD. TOP RIGHT	146.82	DEG.	F
C	17	RAD. BTM RIGHT	133.89	DEG.	F
C	18	GEN. AIR IN	123.56	DEG.	F
C	19	GEN. AIR OUT	132.41	DEG.	F
C	20	GEN. FRAME TOP	138.16	DEG.	F
C	21	GEN. FRAME BTM	126.44	DEG.	F
C	22	GEN. EXCITER	142.88	DEG.	F
C	23	GEN. VOLT. REG.	138.91	DEG.	F
C	24	CONTROL PANEL	135.69	DEG.	F
C	25	RELAY AREA	126.24	DEG.	F
C	26	BATTERY LEFT	139.84	DEG.	F
C	27	BATTERY RIGHT	126.61	DEG.	F
C	28	AIR IN SET	125.89	DEG.	F
C	29	FUEL TANK	88.434	DEG.	F
C	30	FUEL OUTLET	143.89	DEG.	F

END SCAN GROUP 1 20 JAN 88 10:14:07

STOPPED SINGLE SCAN 20 JAN 88 10:14:07

BEGIN SCAN GROUP 1 20 JAN 88 10:21:03
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	713.65	DEG.	F
C	2	EXHAUST 2	667.52	DEG.	F
C	3	EXHAUST 3	659.77	DEG.	F
C	4	EXHAUST 4	698.71	DEG.	F
C	5	EXHAUST 5	753.22	DEG.	F
C	6	EXHAUST 6	661.97	DEG.	F
C	7	ENG. COOL. IN	182.92	DEG.	F
C	8	ENG. COOL. OUT	198.29	DEG.	F
C	9	OIL SUMP	215.42	DEG.	F
C	10	OIL GALLERY	216.88	DEG.	F
C	13	ENG. INTAKE	131.48	DEG.	F
C	14	RAD. TOP LEFT	149.42	DEG.	F
C	15	RAD. BTM LEFT	141.77	DEG.	F
C	16	RAD. TOP RIGHT	143.89	DEG.	F
C	17	RAD. BTM RIGHT	132.79	DEG.	F
C	18	GEN. AIR IN	121.39	DEG.	F
C	19	GEN. AIR OUT	131.19	DEG.	F
C	20	GEN. FRAME TOP	129.48	DEG.	F
C	21	GEN. FRAME BTM	125.72	DEG.	F
C	22	GEN. EXCITER	148.81	DEG.	F
C	23	GEN. VOLT. REG.	131.25	DEG.	F
C	24	CONTROL PANEL	135.68	DEG.	F
C	25	RELAY AREA	123.89	DEG.	F
C	26	BATTERY LEFT	138.38	DEG.	F
C	27	BATTERY RIGHT	126.89	DEG.	F
C	28	AIR IN SET	123.81	DEG.	F
C	29	FUEL TANK	89.852	DEG.	F
C	30	FUEL OUTLET	145.15	DEG.	F

END SCAN GROUP 1 20 JAN 88 10:21:13

STOPPED SINGLE SCAN 20 JAN 88 10:21:13

BEGIN SCAN GROUP 1 20 JAN 88 10:24:31
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	783.48	DEG.	F
C	2	EXHAUST 2	661.51	DEG.	F
C	3	EXHAUST 3	653.15	DEG.	F
C	4	EXHAUST 4	688.55	DEG.	F
C	5	EXHAUST 5	745.97	DEG.	F
C	6	EXHAUST 6	657.84	DEG.	F
C	7	ENG. COOL. IN	185.19	DEG.	F
C	8	ENG. COOL. OUT	191.99	DEG.	F
C	9	OIL SUMP	216.48	DEG.	F
C	10	OIL GALLERY	217.73	DEG.	F
C	13	ENG. INTAKE	131.79	DEG.	F
C	14	RAD. TOP LEFT	158.91	DEG.	F
C	15	RAD. BTM LEFT	143.25	DEG.	F
C	16	RAD. TOP RIGHT	144.35	DEG.	F
C	17	RAD. BTM RIGHT	133.39	DEG.	F
C	18	GEN. AIR IN	123.68	DEG.	F
C	19	GEN. AIR OUT	132.45	DEG.	F
C	20	GEN. FRAME TOP	129.82	DEG.	F
C	21	GEN. FRAME BTM	126.14	DEG.	F
C	22	GEN. EXCITER	148.62	DEG.	F
C	23	GEN. VOLT. REG.	131.88	DEG.	F
C	24	CONTROL PANEL	135.43	DEG.	F
C	25	RELAY AREA	123.45	DEG.	F
C	26	BATTERY LEFT	138.82	DEG.	F
C	27	BATTERY RIGHT	126.82	DEG.	F
C	28	AIR IN SET	124.16	DEG.	F
C	29	FUEL TANK	98.387	DEG.	F
C	30	FUEL OUTLET	145.13	DEG.	F

END SCAN GROUP 1 20 JAN 88 10:24:41

STOPPED SINGLE SCAN 20 JAN 88 10:24:41

BEGIN SCAN GROUP 1 20 JAN 88 10:30:23
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	786.51	DEG.	F
C	2	EXHAUST 2	668.85	DEG.	F
C	3	EXHAUST 3	652.84	DEG.	F
C	4	EXHAUST 4	685.81	DEG.	F
C	5	EXHAUST 5	745.63	DEG.	F
C	6	EXHAUST 6	653.81	DEG.	F
C	7	ENG. COOL. IN	182.18	DEG.	F
C	8	ENG. COOL. OUT	189.34	DEG.	F
C	9	OIL SUMP	216.18	DEG.	F
C	10	OIL GALLERY	217.47	DEG.	F
C	13	ENG. INTAKE	131.31	DEG.	F
C	14	RAD. TOP LEFT	149.84	DEG.	F
C	15	RAD. BTM LEFT	142.31	DEG.	F
C	16	RAD. TOP RIGHT	143.68	DEG.	F
C	17	RAD. BTM RIGHT	133.61	DEG.	F
C	18	GEN. AIR IN	124.56	DEG.	F
C	19	GEN. AIR OUT	132.69	DEG.	F
C	20	GEN. FRAME TOP	129.94	DEG.	F
C	21	GEN. FRAME BTM	126.43	DEG.	F
C	22	GEN. EXCITER	148.83	DEG.	F
C	23	GEN. VOLT. REG.	138.93	DEG.	F
C	24	CONTROL PANEL	135.41	DEG.	F
C	25	RELAY AREA	123.81	DEG.	F
C	26	BATTERY LEFT	137.73	DEG.	F
C	27	BATTERY RIGHT	127.19	DEG.	F
C	28	AIR IN SET	124.94	DEG.	F
C	29	FUEL TANK	91.675	DEG.	F
C	30	FUEL OUTLET	144.89	DEG.	F

END SCAN GROUP 1 20 JAN 88 10:30:32

STOPPED SINGLE SCAN 20 JAN 88 10:30:32

REF. NO. MIL-STD 705; 655.1

REF. NO. MIL-STD 705; 655.1

SHEET 133HS / **OF 30** /

DATE 20 Jan 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDED/OBSERVER KM/GC

Scientific Testing Division

Services **P.O. Box 38**

Group
Hartwood, Virginia 22471

Tel. 703 752 5300

D.C. CONTROL TEST

NTS

ITEM 30 Kw / 60 Hz

General Set

Noted

MPGR. John R. Hollingsworth

MODEL NO. MEP005A

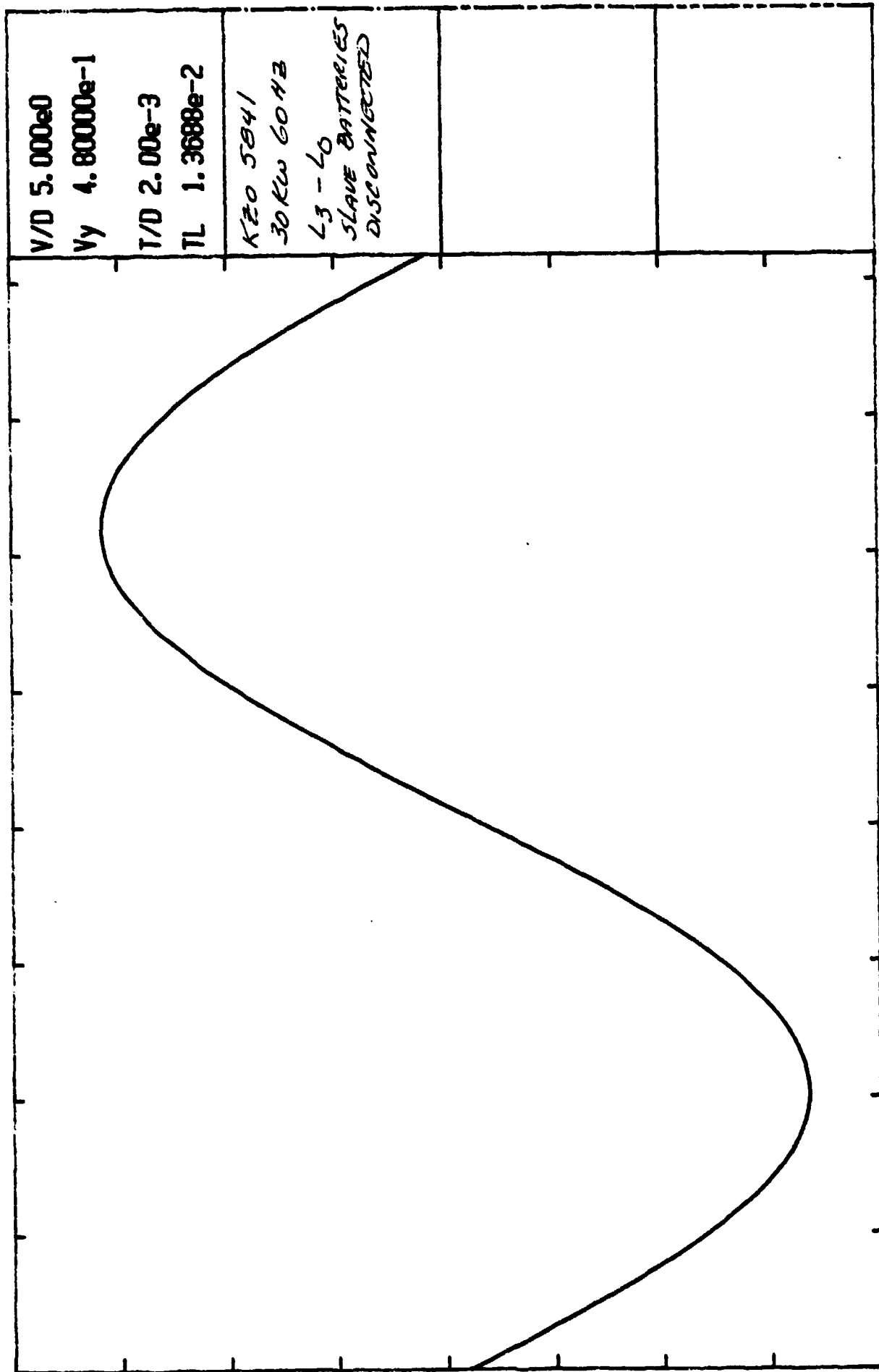
SERIAL NO. K70 584

INST TIME	STEP NO.	LOAD STEP	E-6090D				E-6090D				E-6090D				E-6090D				E-6090D				AMB. TEMP. °F	PRESS. IN/54 IN/50
			V1- VAC	V2- VAC	V3- VAC	V1- AC RMS	V2- AC RMS	V3- AC RMS	V1- Kw	V2- Kw	V3- Kw	V1- Kw	V2- Kw	V3- Kw	POWER FACTOR	FREQ. Hz	VOLTS VDC	AMPS DCA						
1112			START UNIT ON				START BATTERIES																	
1112			START UNIT DOWN				START BATTERIES																	
1113			START UNIT WITH CORRECT				START BATTERIES																	
1114			NO START				START BATTERIES																	
1115			NO START				START BATTERIES																	
1116			NO START				START BATTERIES																	
1117			NO START				START BATTERIES																	
1118			NO START				START BATTERIES																	
1119			NO START				START BATTERIES																	
1120			NO START				START BATTERIES																	
1121			NO START				START BATTERIES																	
1122			NO START				START BATTERIES																	
1123			NO START				START BATTERIES																	
1124			NO START				START BATTERIES																	
1125			NO START				START BATTERIES																	
1126			NO START				START BATTERIES																	
1127			NO START				START BATTERIES																	
1128			NO START				START BATTERIES																	
1129			NO START				START BATTERIES																	
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1133			NO START				START BATTERIES																	
1134			NO START				START BATTERIES																	
1135			NO START				START BATTERIES																	
1136			NO START				START BATTERIES																	
1137			NO START				START BATTERIES																	
1138			NO START				START BATTERIES</																	

APPLIED CHARGING VOLTAGE NOT ADJUSTABLE BY 3V AS PER MCG SABHYA PATA 4.6.2 NOTE 17

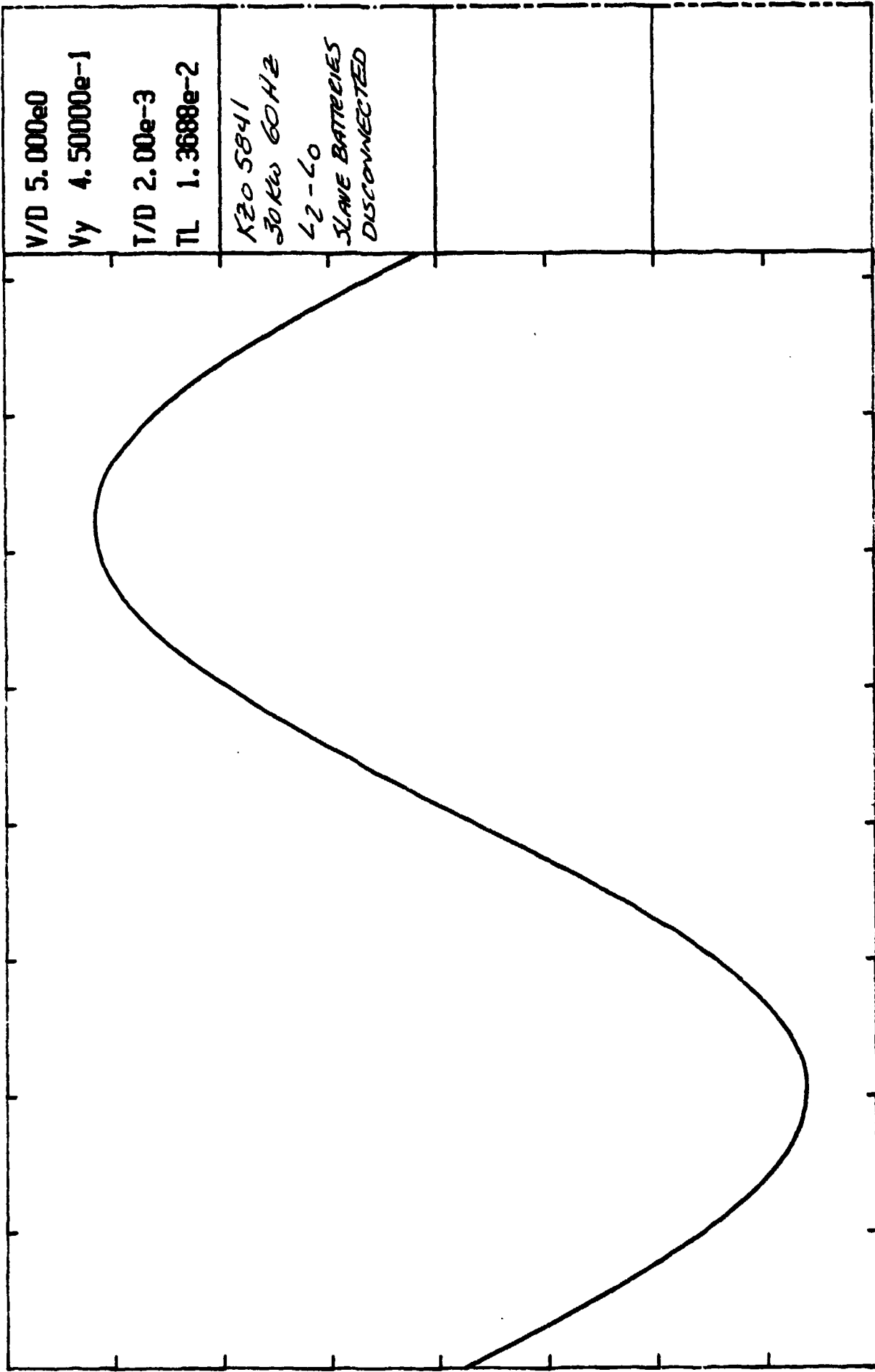
UNABLE TO COMPLETE TEST DUE TO COOLANT OVERTEMP "765- FAILED"

5211



Vx

TL



V/D 5.000e0

Vy 4.50000e-1

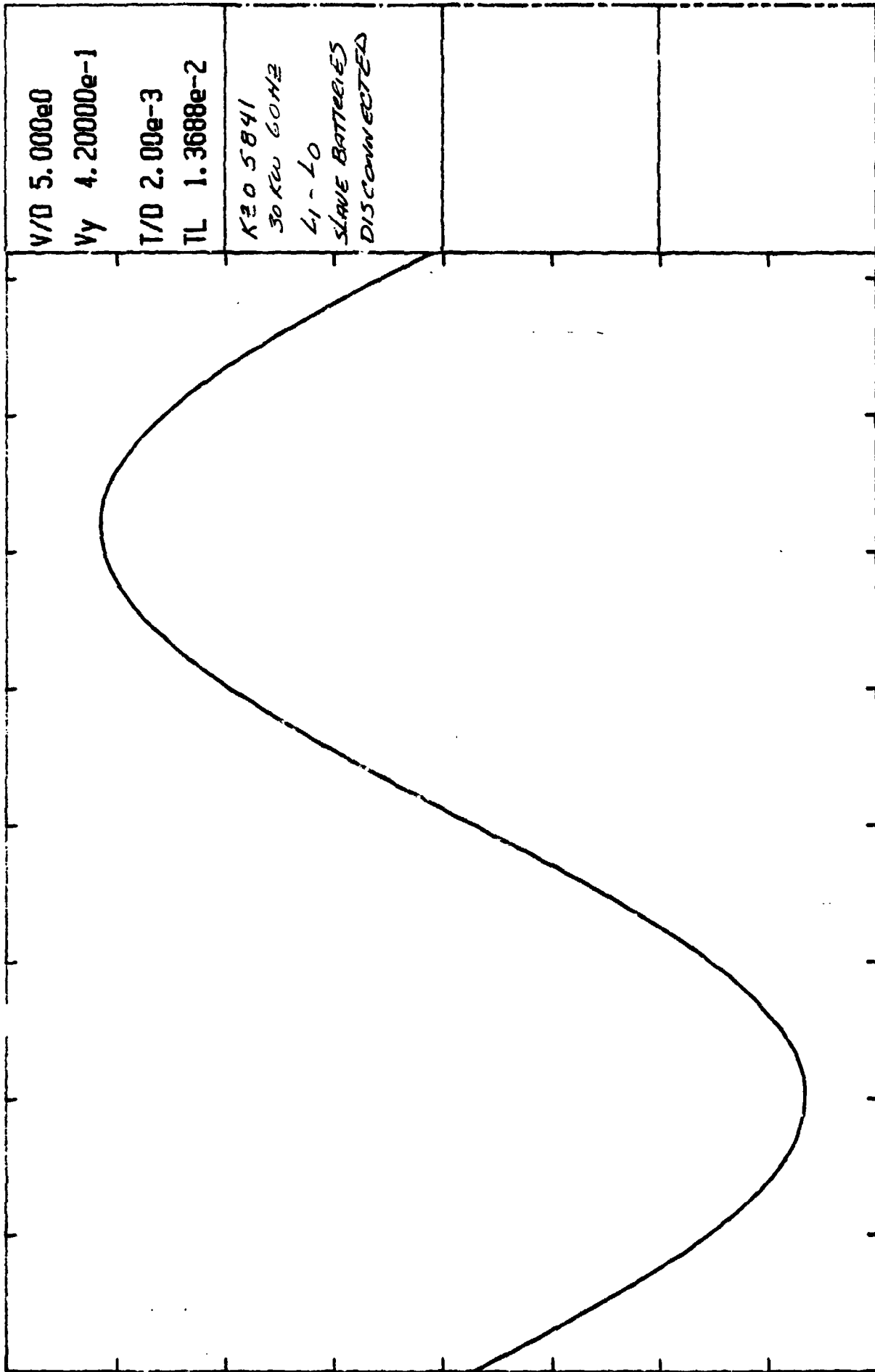
T/D 2.00e-3

TL 1.3688e-2

K205841
30Kw 60Hz
L2-L0
SLAVE BATTERIES
DISCONNECTED

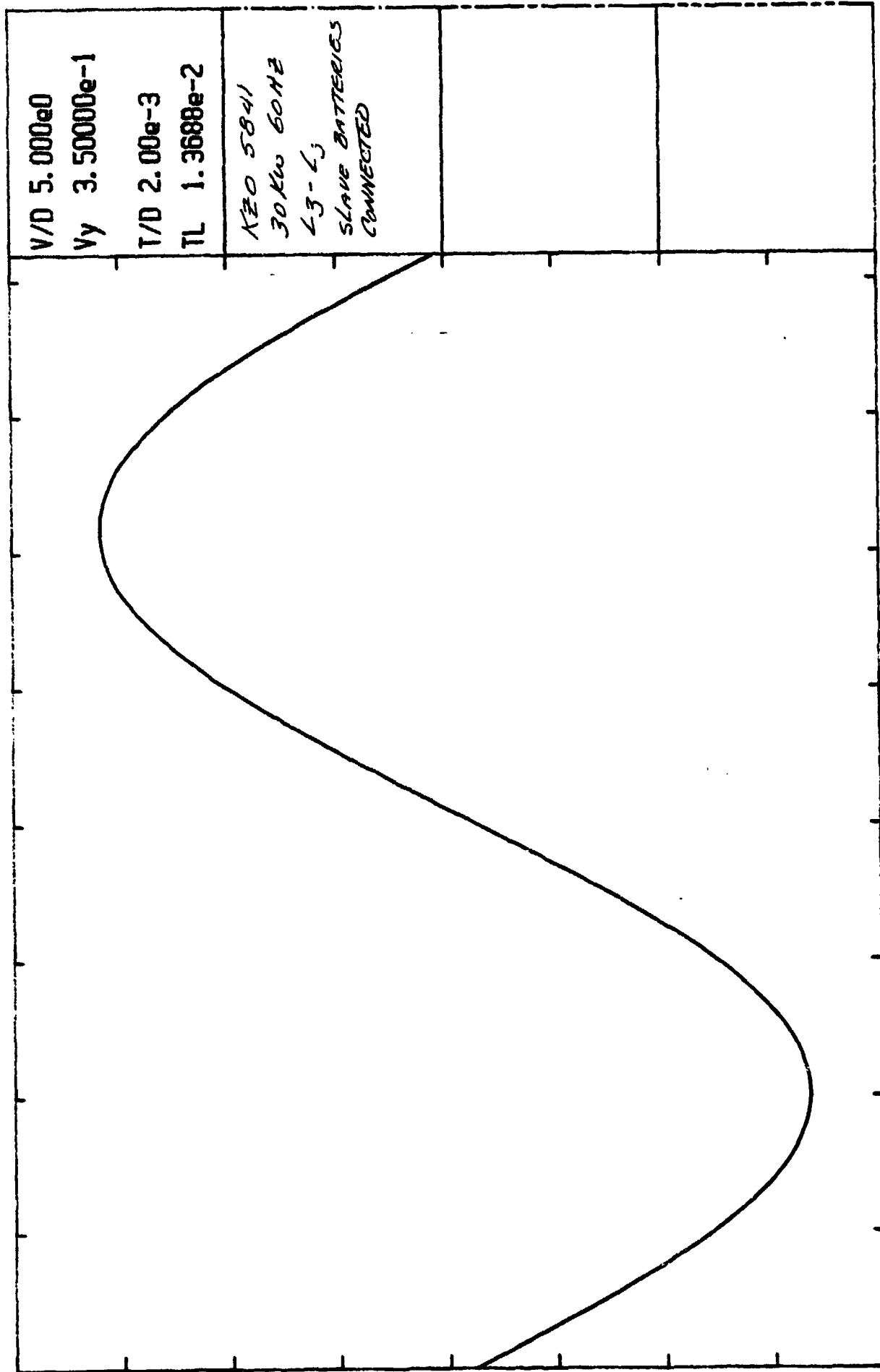
Vx

TL



Vx

TL

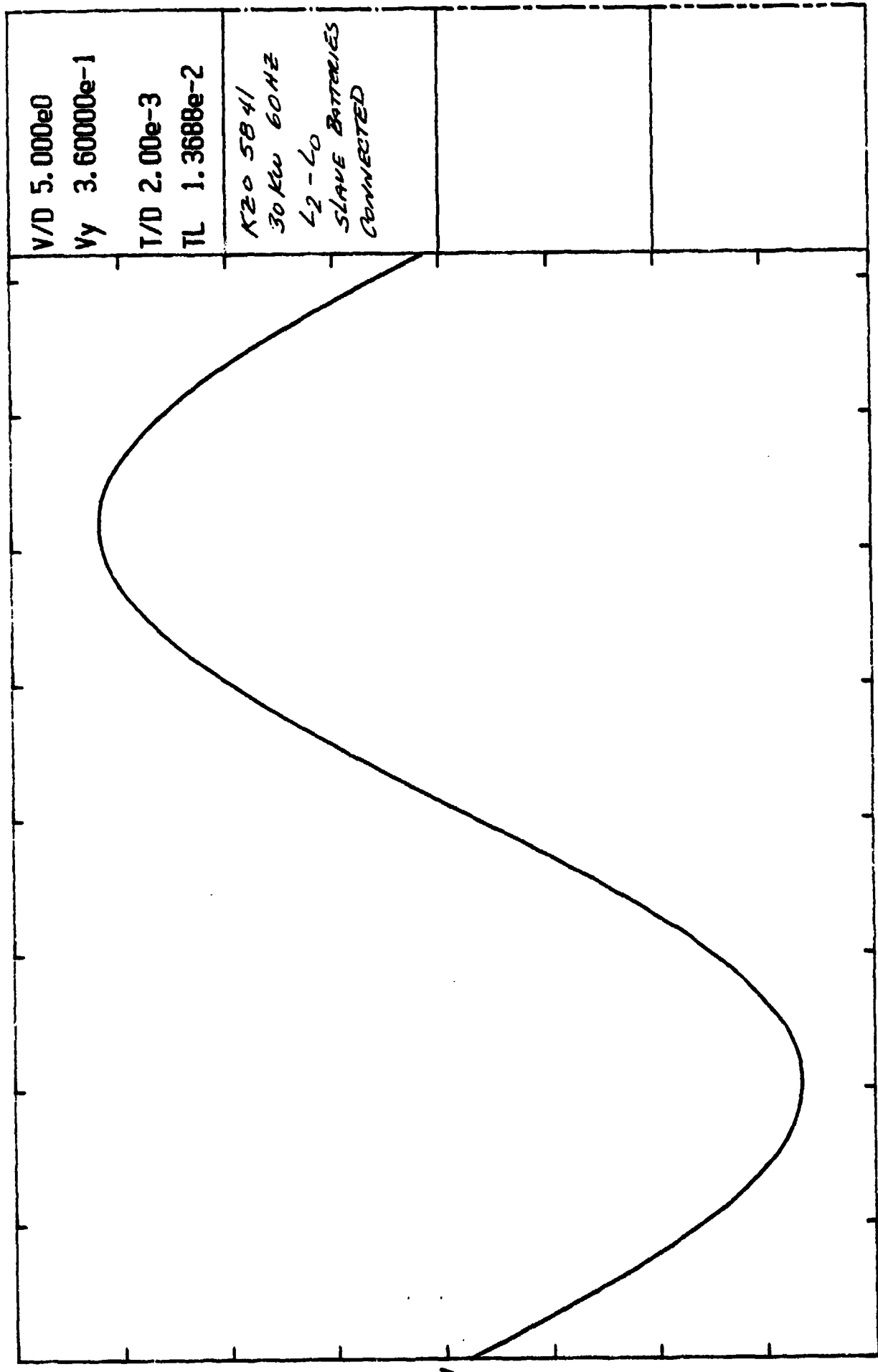


Vx

TL

Vy

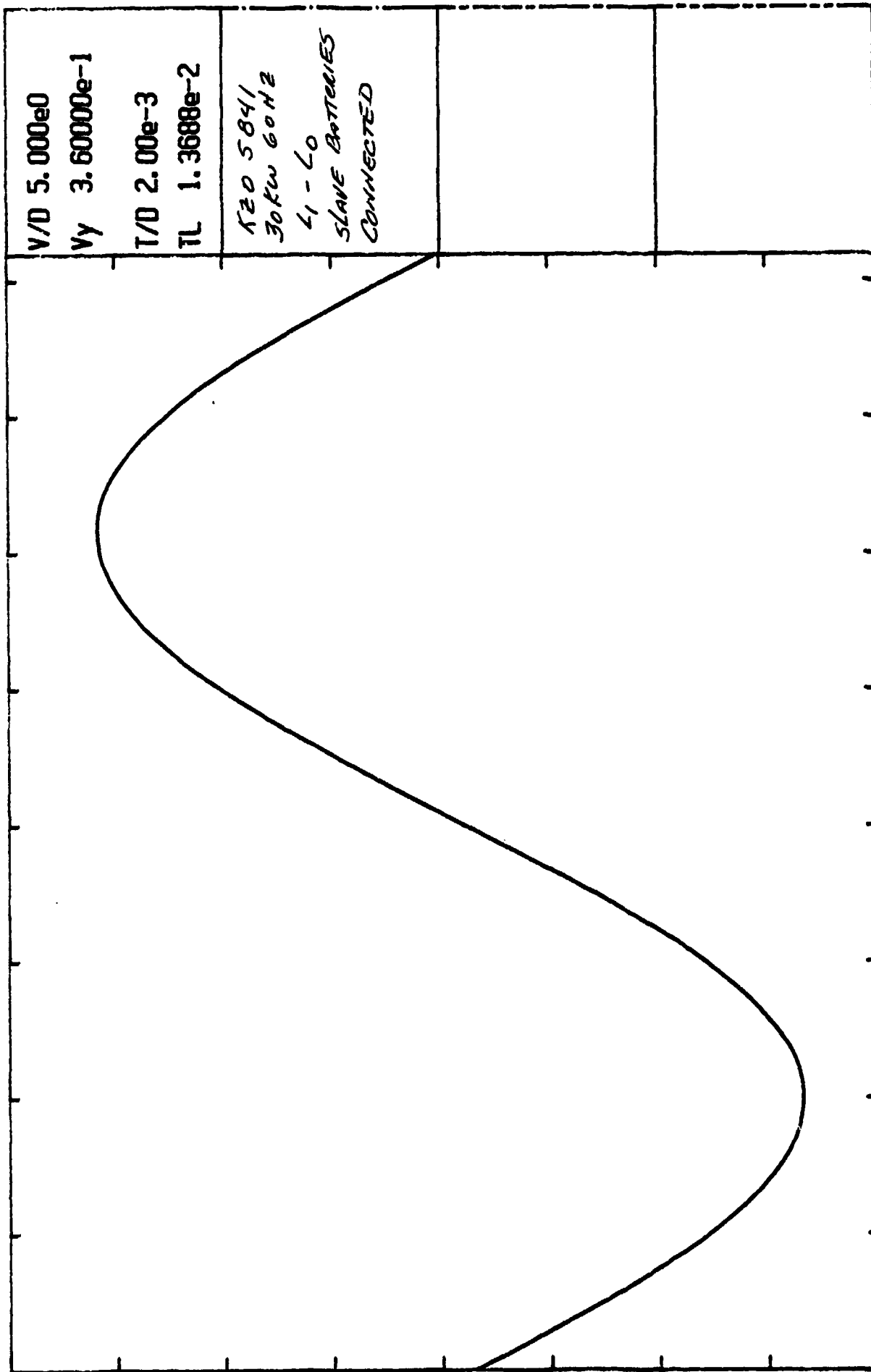
B-39



B-40
VY

Vx

TL



Vx

TL

VY
B-41

OC Control 655.1

BEGIN SCAN GROUP 1 20 JAN 88 11:14:49
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	756.23	DEG.	F
C	2	EXHAUST 2	719.72	DEG.	F
C	3	EXHAUST 3	718.62	DEG.	F
C	4	EXHAUST 4	749.93	DEG.	F
C	5	EXHAUST 5	806.26	DEG.	F
C	6	EXHAUST 6	789.49	DEG.	F
C	7	ENG. COOL. IN	191.84	DEG.	F
C	8	ENG. COOL. OUT	198.41	DEG.	F
C	9	OIL SUMP	192.52	DEG.	F
C	10	OIL GALLERY	194.38	DEG.	F
C	13	ENG. INTAKE	141.23	DEG.	F
C	14	RAD. TOP LEFT	153.55	DEG.	F
C	15	RAD. BTM LEFT	148.85	DEG.	F
C	16	RAD. TOP RIGHT	145.28	DEG.	F
C	17	RAD. BTM RIGHT	126.54	DEG.	F
C	18	GEN. AIR IN	125.93	DEG.	F
C	19	GEN. AIR OUT	135.74	DEG.	F
C	20	GEN. FRAME TOP	134.24	DEG.	F
C	21	GEN. FRAME BTM	129.49	DEG.	F
C	22	GEN. EXCITER	133.74	DEG.	F
C	23	GEN. VOLT. REG.	131.21	DEG.	F
C	24	CONTROL PANEL	131.68	DEG.	F
C	25	RELAY AREA	135.31	DEG.	F
C	26	BATTERY LEFT	116.87	DEG.	F
C	27	BATTERY RIGHT	115.26	DEG.	F
C	28	AIR IN SET	125.69	DEG.	F
C	29	FUEL TANK	96.437	DEG.	F
C	30	FUEL OUTLET	141.96	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:14:59

STOPPED SINGLE SCAN 20 JAN 88 11:14:59

BEGIN SCAN GROUP 1 20 JAN 88 11:22:35
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	484.71	DEG.	F
C	2	EXHAUST 2	473.29	DEG.	F
C	3	EXHAUST 3	487.87	DEG.	F
C	4	EXHAUST 4	549.98	DEG.	F
C	5	EXHAUST 5	565.56	DEG.	F
C	6	EXHAUST 6	513.87	DEG.	F
C	7	ENG. COOL. IN	287.46	DEG.	F
C	8	ENG. COOL. OUT	215.44	DEG.	F
C	9	OIL SUMP	216.68	DEG.	F
C	10	OIL GALLERY	218.33	DEG.	F
C	13	ENG. INTAKE	148.81	DEG.	F
C	14	RAD. TOP LEFT	162.45	DEG.	F
C	15	RAD. BTM LEFT	157.27	DEG.	F
C	16	RAD. TOP RIGHT	151.31	DEG.	F
C	17	RAD. BTM RIGHT	131.38	DEG.	F
C	18	GEN. AIR IN	127.85	DEG.	F
C	19	GEN. AIR OUT	148.63	DEG.	F
C	20	GEN. FRAME TOP	137.56	DEG.	F
C	21	GEN. FRAME BTM	133.38	DEG.	F
C	22	GEN. EXCITER	143.49	DEG.	F
C	23	GEN. VOLT. REG.	133.79	DEG.	F
C	24	CONTROL PANEL	136.59	DEG.	F
C	25	RELAY AREA	141.14	DEG.	F
C	26	BATTERY LEFT	127.18	DEG.	F
C	27	BATTERY RIGHT	127.86	DEG.	F
C	28	AIR IN SET	126.58	DEG.	F
C	29	FUEL TANK	97.696	DEG.	F
C	30	FUEL OUTLET	144.31	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:22:45

STOPPED SINGLE SCAN 20 JAN 88 11:22:45

BEGIN SCAN GROUP 1 20 JAN 88 11:23:26
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	734.39	DEG.	F
C	2	EXHAUST 2	712.38	DEG.	F
C	3	EXHAUST 3	712.88	DEG.	F
C	4	EXHAUST 4	758.41	DEG.	F
C	5	EXHAUST 5	797.88	DEG.	F
C	6	EXHAUST 6	725.85	DEG.	F
C	7	ENG. COOL. IN	284.67	DEG.	F
C	8	ENG. COOL. OUT	212.62	DEG.	F
C	9	OIL SUMP	217.95	DEG.	F
C	10	OIL GALLERY	219.57	DEG.	F
C	13	ENG. INTAKE	149.26	DEG.	F
C	14	RAD. TOP LEFT	162.58	DEG.	F
C	15	RAD. BTM LEFT	157.56	DEG.	F
C	16	RAD. TOP RIGHT	151.81	DEG.	F
C	17	RAD. BTM RIGHT	131.81	DEG.	F
C	18	GEN. AIR IN	129.89	DEG.	F
C	19	GEN. AIR OUT	148.84	DEG.	F
C	20	GEN. FRAME TOP	137.88	DEG.	F
C	21	GEN. FRAME BTM	133.72	DEG.	F
C	22	GEN. EXCITER	143.82	DEG.	F
C	23	GEN. VOLT. REG.	134.21	DEG.	F
C	24	CONTROL PANEL	136.99	DEG.	F
C	25	RELAY AREA	141.51	DEG.	F
C	26	BATTERY LEFT	127.73	DEG.	F
C	27	BATTERY RIGHT	127.63	DEG.	F
C	28	AIR IN SET	126.85	DEG.	F
C	29	FUEL TANK	97.811	DEG.	F
C	30	FUEL OUTLET	145.92	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:23:35

STOPPED SINGLE SCAN 20 JAN 88 11:23:35

BEGIN SCAN GROUP 1 20 JAN 88 11:24:64
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	545.67	DEG.	F
C	2	EXHAUST 2	514.88	DEG.	F
C	3	EXHAUST 3	523.72	DEG.	F
C	4	EXHAUST 4	579.87	DEG.	F
C	5	EXHAUST 5	616.38	DEG.	F
C	6	EXHAUST 6	543.17	DEG.	F
C	7	ENG. COOL. IN	284.97	DEG.	F
C	8	ENG. COOL. OUT	212.85	DEG.	F
C	9	OIL SUMP	219.85	DEG.	F
C	10	OIL GALLERY	228.86	DEG.	F
C	13	ENG. INTAKE	149.55	DEG.	F
C	14	RAD. TOP LEFT	162.88	DEG.	F
C	15	RAD. BTM LEFT	157.33	DEG.	F
C	16	RAD. TOP RIGHT	151.41	DEG.	F
C	17	RAD. BTM RIGHT	132.18	DEG.	F
C	18	GEN. AIR IN	128.85	DEG.	F
C	19	GEN. AIR OUT	141.81	DEG.	F
C	20	GEN. FRAME TOP	138.12	DEG.	F
C	21	GEN. FRAME BTM	134.81	DEG.	F
C	22	GEN. EXCITER	144.28	DEG.	F
C	23	GEN. VOLT. REG.	134.58	DEG.	F
C	24	CONTROL PANEL	137.37	DEG.	F
C	25	RELAY AREA	142.89	DEG.	F
C	26	BATTERY LEFT	128.21	DEG.	F
C	27	BATTERY RIGHT	128.89	DEG.	F
C	28	AIR IN SET	127.38	DEG.	F
C	29	FUEL TANK	97.928	DEG.	F
C	30	FUEL OUTLET	145.63	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:24:13

STOPPED SINGLE SCAN 20 JAN 88 11:24:13

BEGIN SCAN GROUP 1 20 JAN 88 11:24:33
38 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	572.24	DEG.	F
C	2	EXHAUST 2	578.29	DEG.	F
C	3	EXHAUST 3	576.81	DEG.	F
C	4	EXHAUST 4	624.45	DEG.	F
C	5	EXHAUST 5	643.86	DEG.	F
C	6	EXHAUST 6	681.33	DEG.	F
C	7	ENG. COOL. IN	283.29	DEG.	F
C	8	ENG. COOL. OUT	218.69	DEG.	F
C	9	OIL SUMP	228.83	DEG.	F
C	10	OIL GALLERY	221.52	DEG.	F
C	13	ENG. INTAKE	149.52	DEG.	F
C	14	RAD. TOP LEFT	168.51	DEG.	F
C	15	RAD. BTM LEFT	155.91	DEG.	F
C	16	RAD. TOP RIGHT	158.76	DEG.	F
C	17	RAD. BTM RIGHT	132.87	DEG.	F
C	18	GEN. AIR IN	127.47	DEG.	F
C	19	GEN. AIR OUT	148.48	DEG.	F
C	20	GEN. FRAME TOP	138.19	DEG.	F
C	21	GEN. FRAME BTM	134.14	DEG.	F
C	22	GEN. EXCITER	144.46	DEG.	F
C	23	GEN. VOLT. REG.	134.79	DEG.	F
C	24	CONTROL PANEL	137.57	DEG.	F
C	25	RELAY AREA	141.34	DEG.	F
C	26	BATTERY LEFT	128.51	DEG.	F
C	27	BATTERY RIGHT	128.41	DEG.	F
C	28	AIR IN SET	125.95	DEG.	F
C	29	FUEL TANK	97.959	DEG.	F
C	30	FUEL OUTLET	146.86	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:24:43

STOPPED SINGLE SCAN 20 JAN 88 11:24:43

BEGIN SCAN GROUP 1 20 JAN 88 11:25:14
38 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	559.45	DEG.	F
C	2	EXHAUST 2	562.41	DEG.	F
C	3	EXHAUST 3	565.94	DEG.	F
C	4	EXHAUST 4	619.55	DEG.	F
C	5	EXHAUST 5	666.67	DEG.	F
C	6	EXHAUST 6	581.58	DEG.	F
C	7	ENG. COOL. IN	283.15	DEG.	F
C	8	ENG. COOL. OUT	218.82	DEG.	F
C	9	OIL SUMP	228.68	DEG.	F
C	10	OIL GALLERY	222.52	DEG.	F
C	13	ENG. INTAKE	149.89	DEG.	F
C	14	RAD. TOP LEFT	161.46	DEG.	F
C	15	RAD. BTM LEFT	156.43	DEG.	F
C	16	RAD. TOP RIGHT	151.84	DEG.	F
C	17	RAD. BTM RIGHT	132.38	DEG.	F
C	18	GEN. AIR IN	127.62	DEG.	F
C	19	GEN. AIR OUT	148.68	DEG.	F
C	20	GEN. FRAME TOP	138.31	DEG.	F
C	21	GEN. FRAME BTM	134.38	DEG.	F
C	22	GEN. EXCITER	144.68	DEG.	F
C	23	GEN. VOLT. REG.	135.12	DEG.	F
C	24	CONTROL PANEL	138.84	DEG.	F
C	25	RELAY AREA	141.29	DEG.	F
C	26	BATTERY LEFT	128.87	DEG.	F
C	27	BATTERY RIGHT	128.77	DEG.	F
C	28	AIR IN SET	125.48	DEG.	F
C	29	FUEL TANK	98.155	DEG.	F
C	30	FUEL OUTLET	146.23	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:25:23

STOPPED SINGLE SCAN 20 JAN 88 11:25:23

BEGIN SCAN GROUP 1 20 JAN 88 11:25:51
38 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	639.99	DEG.	F
C	2	EXHAUST 2	638.11	DEG.	F
C	3	EXHAUST 3	631.74	DEG.	F
C	4	EXHAUST 4	675.18	DEG.	F
C	5	EXHAUST 5	786.12	DEG.	F
C	6	EXHAUST 6	658.82	DEG.	F
C	7	ENG. COOL. IN	281.98	DEG.	F
C	8	ENG. COOL. OUT	289.13	DEG.	F
C	9	OIL SUMP	221.59	DEG.	F
C	10	OIL GALLERY	223.83	DEG.	F
C	13	ENG. INTAKE	148.68	DEG.	F
C	14	RAD. TOP LEFT	168.57	DEG.	F
C	15	RAD. BTM LEFT	155.87	DEG.	F
C	16	RAD. TOP RIGHT	158.77	DEG.	F
C	17	RAD. BTM RIGHT	132.61	DEG.	F
C	18	GEN. AIR IN	127.95	DEG.	F
C	19	GEN. AIR OUT	148.99	DEG.	F
C	20	GEN. FRAME TOP	138.41	DEG.	F
C	21	GEN. FRAME BTM	134.45	DEG.	F
C	22	GEN. EXCITER	144.68	DEG.	F
C	23	GEN. VOLT. REG.	135.39	DEG.	F
C	24	CONTROL PANEL	138.31	DEG.	F
C	25	RELAY AREA	141.22	DEG.	F
C	26	BATTERY LEFT	129.16	DEG.	F
C	27	BATTERY RIGHT	129.81	DEG.	F
C	28	AIR IN SET	126.29	DEG.	F
C	29	FUEL TANK	98.188	DEG.	F
C	30	FUEL OUTLET	146.83	DEG.	F

END SCAN GROUP 1 20 JAN 88 11:26:08

STOPPED SINGLE SCAN 20 JAN 88 11:26:08

TEST DATA

ITEM	30kw / 600 Hz
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Generation Set

035 MAY

AFGR. John R Hollenbeck

MODEL NO. 119005A

SERIAL NO. K205341

AT&T

**National
Technical
Systems**

**Scientific
Services
Group**

Testing Division

P.O. Box 38

Harwood, Virginia 22471

Tel: 703 752 5300

Method 572.3

CURRENT INTERRUPT TEST
(OVERVOLTAGE)

REF. NO. MIL-STD 705

SHEET **OF** **30**

DATE 20 JAN 1988

JOB NO. 555-2140

PROJ. ENCL.

RECORDER/OBSERVER KM/GC

[illegible]

2314

ITEM 30 Kw / 60 Hz

GENERATOR SET

MODIFIED

MFGR. JGWW P. Kellingsworth

MODEL NO. *MEP 005A*

SERIAL NO. KZO 5341

NTS

REF. NO. MIL-STD 705 Para. 608.1

SHEET / OF 2

DATE 22 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

Testing Division

PO Box 38

Harlowd Virginia 22471

Tel: 703 752 5300

Regulation, Stability and Transient Response Test

(Short Term)

INST TIME	STEP NO.	LOAD STEP	E 6028 D VOLTAGE			E 6040 D AMPERES %			E 6230 D KILOWATTS %			POWER FACT	FREQ. Hz	E21670 EXCITER FIELD		AMB. TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW			VOLTS VDC	AMPS DCA	
0939			119.5	120.5	120.	2.5	2.52	2.52	.245	.25	.25	.80	60.0	2.4	3.5	126
0940		R/L	119.5	120.5	120.	2.5	2.51	2.53	.295	.25	.25	.80	60.0	2.7	3.6	124
0950		R/L	119.5	120.5	120.5	2.5	2.51	2.53	.245	.25	.25	.80	59.5	2.6	3.6	123
1000		R/L	119.5	120.5	120.5	2.5	2.51	2.53	.245	.25	.25	.80	59.5	2.6	3.6	123
1000	1	R/L	119.5	120.5	120.	2.5	2.53	2.53	.245	.25	.25	.80	59.5	2.6	3.6	123
	2	N/L	121	121	121	2.5	2.53	2.53	.245	.25	.25	.80	61.5	4.1	2.35	125
	3	R/L	119.5	120.5	120	2.5	2.53	2.53	.245	.25	.25	.80	59.5	2.6	3.6	125
	4	N/L	121	121	121	2.5	2.53	2.53	.245	.25	.25	.80	61.5	4.2	1.55	125
	5	R/L	119.5	120.5	120	2.5	2.51	2.53	.245	.25	.25	.80	59.5	2.6	3.6	124
	6	N/L	121	121	121	2.5	2.53	2.53	.245	.25	.25	.80	61.4	4.1	1.55	124
	7	R/L	119.5	120.5	120	2.5	2.53	2.53	.245	.25	.25	.80	59.5	2.6	3.6	124
	8	N/L	121.5	121.1	121.1	2.5	2.53	2.53	.245	.25	.25	.80	61.4	4.1	1.55	125
	9	3/4	120	120.5	120.5	1.86	1.89	1.89	.183	.187	.187	.80	60.5	.6	3.0	124
	10	N/L	121	121.1	121.1	1.86	1.89	1.89	.184	.187	.187	.80	61.5	4.1	1.55	123
	11	3/4	120	121	120.5	1.86	1.89	1.89	.184	.187	.187	.80	60.45	.8	3.0	125
	12	N/L	121	121	121	1.86	1.89	1.89	.184	.187	.187	.80	61.4	4.1	1.55	125
	13	3/4	120	120.5	120.5	1.86	1.89	1.89	.184	.187	.187	.80	60.5	.8	3.0	125
	14	N/L	121	121.5	121	1.86	1.89	1.89	.184	.187	.187	.80	61.4	4.1	1.55	124
	15	1/2	120.5	121	121	1.87	1.3	1.3	.124	.125	.125	.80	60.7	6.6	2.45	124
	16	N/L	121	121	121	1.87	1.3	1.3	.125	.126	.126	.80	61.4	4.1	1.55	124
	17	1/2	120	121	121	1.87	1.3	1.3	.125	.126	.126	.80	60.7	6.6	2.45	124
	18	N/L	121	121	121	1.87	1.3	1.3	.124	.126	.126	.80	61.4	4.0	1.55	124
	19	1/2	120.5	121	121	1.87	1.3	1.3	.124	.126	.126	.80	60.6	6.6	2.46	126
	20	N/L	121	121.1	121	1.87	1.3	1.3	.124	.126	.126	.80	61.4	4.0	1.65	124
	21	1/4	120.5	121	121	.65	.66	.66	.062	.062	.062	.80	60.9	5.3	2.0	126

Notes:

TEST DATA

REF. NO. MIL-STD 705 Para. 608.1

SHEET 12 OF 2

DATE 22 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER km/Gc

MTS

ITEM 30 KW / 60 Hz

GENERATOR SET

MANUAL

MEGR. JOHN P. HOLMES/DRTH

MODEL NO. MRP 005A

SERIAL NO. K20 5841

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Hawthorn, Virginia 22471
Tel: 703 752 5300

Frequency and Voltage

Regulation, Stability and Transient Response Test

(Short Term)

INST TIME	STEP NO.	LOAD STEP	VOLTAGE			AMPERES			KILOWATTS			POWER FACTOR	FREQ. HZ	EXCITER		AMB. TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw			VOLTS VDC	AMPS DCA	
	23	NK	121	121.1	121	.66	.66	.66	.062	.062	.062	.80	61.3	4.0	1.5	125
	23	YH	120.5	121	121								60.5	5.2	2.0	124
	24	NK	121	121.5	121	.66	.66	.66	.062	.062	.062	.80	61.4	4.0	1.5	124
	25	YH	120.5	121	121								60.5	5.2	2.0	124
	26	NK	120	121	121	.66	.66	.66	.062	.062	.062	.80	61.3	4.0	1.5	123
	27	YH	119.5	120.5	120.5	2.5	2.53	2.52	.245	.25	.25	.80	59.8	7.9	3.5	124
	28	NK	121	121.5	121	2.5	2.53	2.52	.245	.25	.25	.80	61.4	7.9	3.5	123
	29	YH	119.5	120.5	120	2.5	2.53	2.52	.245	.25	.25	.80	59.8	7.9	3.5	124
	30	NK	121	121.5	121	2.5	2.53	2.52	.245	.25	.25	.80	61.4	7.9	3.5	124
	31	YH	119.5	120.5	120	2.5	2.53	2.52	.245	.25	.25	.80	59.8	7.9	3.5	124
	32	NK	121	121.5	121	2.5	2.53	2.52	.245	.25	.25	.80	61.4	7.9	3.5	124
1030		END OF TEST				5407	5417	5407								

NOTES:

TEST DATA

WAS

ITEM 30KW 60 HZ

GENERATOR SET

MODIFIED

MFR. JOHN R. HOLLINGSWORTH

MODEL NO. MEP 005A

SERIAL NO. KZ 05841

REF. NO. MIL STD 205

SHEET 1 OF 3

DATE 5 FEB 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER

National Scientific Testing Division
Technical Services P.O. Box 38
Systems Group Hailwood, Virginia 22471

FREQUENCY AND VOLTAGE REGULATION, 1st 703 752 5300

STABILITY, AND TRANSIENT RESPONSE TEST

(SEEK TIGHT)

LOAD STEP	MAXIMUM EXCURSION				REGULATION		FREQUENCY		CONSTANT LOAD		VOLTAGE		REG. TIME		CONSTANT LOAD	
	OVERLOAD Hz	INTERLUPT Hz	INTERLUPT %	INTERLUPT	WALT	WALT	FREQ. Hz	WALT	WALT	WALT	WALT	WALT	SEC.	SEC.	WALT	WALT
1-2	1.15	1.91			.47	.07	2.66	.83	2.26	1.88			.16		.17	.15
2-3			1.25	2.26	1.17	.05	2.75	.83			2.60	2.17	.23		.17	.15
3-4	1.25	2.08			.39	.17	2.75	.83	2.26	1.88			.16		.17	.15
4-5			1.42	2.37	1.09	.05	2.83	.83			3.13	2.60	.31		.17	.15
5-6	1.22	2.03			.39	.10	2.66	.83	2.26	1.88			.08		.09	.07
6-7			1.42	2.37	1.4	.02	2.58	.83			3.13	2.60	.31		.17	.15
7-8	1.29	2.14			.31	.09	2.58	.91	2.43	2.03			.16		.17	.15
8-9			1.01	1.69	.47	.02	1.5	.50			1.22	1.01	.08		.17	.15
9-10	.90	1.57			.39	.07	1.66	.50	1.74	1.45			.16		.17	.15
10-11			1.04	1.74	.47	.04	1.75	.50			1.91	1.59	.16		.17	.15
11-12	.90	1.51			.31	.07	1.58	.41	1.22	1.01			.16		.17	.15
12-13			1.04	1.74	.39	.05	1.5	.41			1.74	1.45	.23		.17	.15
13-14	.83	1.39			.31	.07	1.5	.41	1.91	1.59			.16		.17	.15

NOTES:

TEST DATA

ITEM 30 KW 60 HZ

GENERATOR SET

MODIFIED

NGFR. TOMMY R. HOLMESWORTH

MODEL NO. MEF 005A

SERIAL NO. K205841

WAS

National
Technical
Systems

Scientific
Services
Group

Testing Division
P.O. Box 30
Hartwood, Virginia 22471

REF. NO. 144520205

SHEET 2 OF 3

DATE 15 FEB 1985

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER

FREQUENCY AND VOLTAGE REGULATION,
STABILITY, AND TRANSIENT RESPONSE TEST
(SEEK TIFR1)

ITEM	MAXIMUM EXCURSION		FREQUENCY		CONSTANT LOAD		VOLTAGE		REG.		CONSTANT LOAD	
	OVERSAMPLING	Hz	INTERVAL	Hz	TYPE	± MAXIMUM	INTERVAL	Hz	TYPE	± MAXIMUM	INTERVAL	± MAXIMUM
14-15		.63	1.04	.23	0	.04			0	.09		.07
15-16		.63	1.04	0	0	.10			0	.09		.07
16-17		.69	1.16	.31	0	.07			.08	.17		.15
17-18		.63	1.04	0	0	.07			.08	.17		.15
18-19		.66	1.10	.35	0	.07			0	.09		.07
19-20		1.66	1.10	.31	0	.09			0	.09		.07
20-21		.17	.25	0	0	.07			0	.09		.07
21-22		.21	.35	0	0	.07			0	.09		.07
22-23		.28	.46	0	0	.09			0	.09		.07
23-24		.28	.46	0	0	.12			0	.09		.07
24-25		.28	.46	0	0	.09			0	.09		.07
25-26		.28	.46	0	0	.09			0	.09		.07
26-27		1.35	2.26	.78	0	.04			.23	.09		.07

NOTES:

ITEM 30 KW 60 HZ
GENERATOR SET
MODIFIED
HFGR. JOHN R HOLLMAN SWATH
MODEL NO. MEP 005A
SERIAL NO. K205841

REF. NO. M/K 570 705
SHEET 3 OF 3
DATE 5 FEB 1988
JOB NO. 555-2140
PROJ. ENGR. _____
RECORDER/OBSERVER _____

**STABILITY, AND TRANSIENT RESPONSE, TEST
(IND. LINE)**

[illegible]

NOTES:

PREC - ULTRACE Regulation (SHORT TERM) (OP.)

BEGIN SCAN GROUP 1 22 JAN 88 09:39:51
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	774.58	DEG.	F
C	2	EXHAUST 2	784.62	DEG.	F
C	3	EXHAUST 3	699.15	DEG.	F
C	4	EXHAUST 4	741.76	DEG.	F
C	5	EXHAUST 5	788.28	DEG.	F
C	6	EXHAUST 6	785.36	DEG.	F
C	7	ENG. COOL. IN	185.73	DEG.	F
C	8	ENG. COOL. OUT	194.13	DEG.	F
C	9	OIL SUMP	224.42	DEG.	F
C	10	OIL GALLERY	225.11	DEG.	F
C	13	ENG. INTAKE	131.51	DEG.	F
C	14	RAD. TOP LEFT	152.16	DEG.	F
C	15	RAD. BTM LEFT	141.92	DEG.	F
C	16	RAD. TOP RIGHT	142.84	DEG.	F
C	17	RAD. BTM RIGHT	133.55	DEG.	F
C	18	GEN. AIR IN	124.82	DEG.	F
C	19	GEN. AIR OUT	136.52	DEG.	F
C	20	GEN. FRAME TOP	131.88	DEG.	F
C	21	GEN. FRAME BTM	126.54	DEG.	F
C	22	GEN. EXCITER	135.38	DEG.	F
C	23	GEN. VOLT. REG.	131.74	DEG.	F
C	24	CONTROL PANEL	135.42	DEG.	F
C	25	RELAY AREA	122.28	DEG.	F
C	26	BATTERY LEFT	137.23	DEG.	F
C	27	BATTERY RIGHT	126.68	DEG.	F
C	28	AIR IN SET	126.14	DEG.	F
C	29	FUEL TANK	89.842	DEG.	F
C	30	FUEL OUTLET	145.54	DEG.	F

END SCAN GROUP 1 22 JAN 88 09:40:01

STOPPED SINGLE SCAN 22 JAN 88 09:40:01

BEGIN SCAN GROUP 1 22 JAN 88 09:49:54
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	798.45	DEG.	F
C	2	EXHAUST 2	754.96	DEG.	F
C	3	EXHAUST 3	768.65	DEG.	F
C	4	EXHAUST 4	808.64	DEG.	F
C	5	EXHAUST 5	858.23	DEG.	F
C	6	EXHAUST 6	794.11	DEG.	F
C	7	ENG. COOL. IN	282.33	DEG.	F
C	8	ENG. COOL. OUT	211.88	DEG.	F
C	9	OIL SUMP	229.18	DEG.	F
C	10	OIL GALLERY	238.16	DEG.	F
C	13	ENG. INTAKE	138.43	DEG.	F
C	14	RAD. TOP LEFT	162.98	DEG.	F
C	15	RAD. BTM LEFT	149.54	DEG.	F
C	16	RAD. TOP RIGHT	146.68	DEG.	F
C	17	RAD. BTM RIGHT	135.14	DEG.	F
C	18	GEN. AIR IN	121.76	DEG.	F
C	19	GEN. AIR OUT	139.58	DEG.	F
C	20	GEN. FRAME TOP	133.68	DEG.	F
C	21	GEN. FRAME BTM	127.75	DEG.	F
C	22	GEN. EXCITER	138.75	DEG.	F
C	23	GEN. VOLT. REG.	132.23	DEG.	F
C	24	CONTROL PANEL	136.85	DEG.	F
C	25	RELAY AREA	123.31	DEG.	F
C	26	BATTERY LEFT	148.85	DEG.	F
C	27	BATTERY RIGHT	128.78	DEG.	F
C	28	AIR IN SET	124.85	DEG.	F
C	29	FUEL TANK	91.426	DEG.	F
C	30	FUEL OUTLET	143.63	DEG.	F

END SCAN GROUP 1 22 JAN 88 09:50:03

STOPPED SINGLE SCAN 22 JAN 88 09:50:03

BEGIN SCAN GROUP 1 22 JAN 88 09:59:52
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	789.86	DEG.	F
C	2	EXHAUST 2	757.24	DEG.	F
C	3	EXHAUST 3	763.65	DEG.	F
C	4	EXHAUST 4	804.66	DEG.	F
C	5	EXHAUST 5	851.39	DEG.	F
C	6	EXHAUST 6	785.67	DEG.	F
C	7	ENG. COOL. IN	283.77	DEG.	F
C	8	ENG. COOL. OUT	213.48	DEG.	F
C	9	OIL SUMP	233.56	DEG.	F
C	10	OIL GALLERY	234.35	DEG.	F
C	13	ENG. INTAKE	138.87	DEG.	F
C	14	RAD. TOP LEFT	162.96	DEG.	F
C	15	RAD. BTM LEFT	158.88	DEG.	F
C	16	RAD. TOP RIGHT	147.21	DEG.	F
C	17	RAD. BTM RIGHT	136.26	DEG.	F
C	18	GEN. AIR IN	128.88	DEG.	F
C	19	GEN. AIR OUT	148.58	DEG.	F
C	20	GEN. FRAME TOP	134.31	DEG.	F
C	21	GEN. FRAME BTM	127.73	DEG.	F
C	22	GEN. EXCITER	138.12	DEG.	F
C	23	GEN. VOLT. REG.	133.98	DEG.	F
C	24	CONTROL PANEL	136.87	DEG.	F
C	25	RELAY AREA	122.87	DEG.	F
C	26	BATTERY LEFT	142.84	DEG.	F
C	27	BATTERY RIGHT	138.87	DEG.	F
C	28	AIR IN SET	123.78	DEG.	F
C	29	FUEL TANK	93.985	DEG.	F
C	30	FUEL OUTLET	144.56	DEG.	F

END SCAN GROUP 1 22 JAN 88 10:00:02

STOPPED SINGLE SCAN 22 JAN 88 10:00:02

BEGIN SCAN GROUP 1 22 JAN 88 10:09:52
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	791.55	DEG.	F
C	2	EXHAUST 2	755.84	DEG.	F
C	3	EXHAUST 3	764.83	DEG.	F
C	4	EXHAUST 4	806.12	DEG.	F
C	5	EXHAUST 5	853.61	DEG.	F
C	6	EXHAUST 6	785.77	DEG.	F
C	7	ENG. COOL. IN	284.79	DEG.	F
C	8	ENG. COOL. OUT	214.43	DEG.	F
C	9	OIL SUMP	235.72	DEG.	F
C	10	OIL GALLERY	236.44	DEG.	F
C	13	ENG. INTAKE	138.78	DEG.	F
C	14	RAD. TOP LEFT	164.48	DEG.	F
C	15	RAD. BTM LEFT	158.58	DEG.	F
C	16	RAD. TOP RIGHT	148.29	DEG.	F
C	17	RAD. BTM RIGHT	137.26	DEG.	F
C	18	GEN. AIR IN	121.79	DEG.	F
C	19	GEN. AIR OUT	141.88	DEG.	F
C	20	GEN. FRAME TOP	135.41	DEG.	F
C	21	GEN. FRAME BTM	128.77	DEG.	F
C	22	GEN. EXCITER	138.94	DEG.	F
C	23	GEN. VOLT. REG.	135.12	DEG.	F
C	24	CONTROL PANEL	137.88	DEG.	F
C	25	RELAY AREA	123.58	DEG.	F
C	26	BATTERY LEFT	144.31	DEG.	F
C	27	BATTERY RIGHT	132.48	DEG.	F
C	28	AIR IN SET	125.81	DEG.	F
C	29	FUEL TANK	96.143	DEG.	F
C	30	FUEL OUTLET	145.27	DEG.	F

END SCAN GROUP 1 22 JAN 88 10:10:01

STOPPED SINGLE SCAN 22 JAN 88 10:10:01

TEST DATA

ITEM 30 kw / 60 Hz

Generator Set

Model

HFGR. JOHN R. HOLLINGSWORTH

MODEL NO. 1150 005A

SERIAL NO. K20 5841

NAS

National Technical Systems

Scientific Services Group

Testing Division
P.O. Box 38
Hillwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705

SHEET 2 OF 2

DATE 22 JAN 1980

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER KM/62/80

INST TIME	STEP NO.	LOAD STEP	VOLTAGE			AMPERES			WATTS			FACOR	FREQ.	VOLTS	TEMP.	PRESS
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0					
1250			VAC	VAC	VAC	AC METS	AC METS	AC METS								
1250		OK	122.5	124	126	2.56	2.61	2.65	2.56	2.61	2.65	.62	57.6	11.5	124	13.30.8
1300		OK	123	124	126	2.52	2.56	2.61	2.52	2.56	2.61	.61	60.0	11.7	126	13.33.7
1303			OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD	OVERLOAD
1303		OK	119.5	120.5	121.5	2.5	2.52	2.54	2.5	2.52	2.54	.80	60.3	9.8	124	13.37.1
1317		OK	119.5	120.5	121.5	2.5	2.52	2.54	2.5	2.52	2.54	.80	60.3	9.8	121	13.37.1
1317		OK	119.5	120.5	121.5	2.5	2.52	2.54	2.5	2.52	2.54	.80	60.3	9.8	125	13.37.1
1349		OK	119.5	120.5	121.5	2.5	2.52	2.54	2.5	2.52	2.54	.80	60.3	9.8	123	13.37.1
1439		OK	117.5	120	120	2.75	2.76	2.76	2.75	2.76	2.76	.735	60.1	11.3	124	13.37.1
1519		OK	117.5	120	120	2.75	2.76	2.76	2.75	2.76	2.76	.735	60.1	11.3	125	13.37.1
1519		OK	117.5	120	120	2.75	2.76	2.76	2.75	2.76	2.76	.735	60.1	11.3	125	13.37.1
1519		OK	117.5	120	120	2.75	2.76	2.76	2.75	2.76	2.76	.735	60.1	11.3	125	13.37.1

8-51

TEST DATA

ITEM 30 Kw / 60 Hz

GENERATOR SET

MODIFIED

HFGR. JOHN R. HOLLYSANDER

MODEL NO. MEP 005 A

SERIAL NO. K20 5841

NAS

National
Technical
Systems

Scientific
Services
Group

Testing Division
P.O. Box 38
Haltwood, Virginia 22471
Tel: 703 752 5300

Method 572.2

Circuit Interconnection
(Cover Card)

REF. NO. MIL-STD 705

SHEET 1 OF 2

DATE 22 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER KM/AS/GC

INST TIME	LOAD STEP	E 6020 0 VOLTAGE			E 6040 0 AMPERES			E 6050 0 KILOWATTS			E 6060 0 POWER FACTOR	E 6070 0 EXCITER VOLTS	E 6080 0 EXCITER AMPS	AMB. TEMP. °F	PRESS IN HG
		L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0					
		VAC	VAC	VAC	AC RMS	AC RMS	AC RMS	AC RMS	AC RMS	AC RMS	PF	VDC	ACA	°F	IN HG
1057		START	START	START	START	START	START	START	START	START					
1100	ALL	119.5	120.5	120	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.4	3.5	124	13.3
1110	ALL	119.5	120.5	120	2.5	2.51	2.51	2.5	2.5	2.5	.80	7.6	3.55	125	13.0
1120	ALL	119.5	120.5	120.5	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.7	3.6	124	13.1
1130	ALL	119.5	120.5	120.5	2.5	2.53	2.52	2.5	2.5	2.5	.80	7.8	3.6	126	13.1
1131	OK	APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.62	13.0	4.8	126	13.0
1131	OK	119.5	120.5	120	3.25	3.3	3.25	2.5	2.5	2.5	.62	13.4	4.85	123	13.0
1136		OVER LOAD	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK					
1145		APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.8	3.6	123	13.3
1144	ALL	119.5	120.5	120	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.8	3.6	124	13.1
1150	ALL	119.5	120.5	120.5	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.8	3.6	124	13.1
1159		APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.60	10.6	3.9	124	13.3
1157	OK	115	120	120.8	3.25	3.25	3.25	2.53	2.53	2.53	.60	10.7	3.9	124	13.4
1204	OK	115	120.5	120.5	3.25	3.25	3.25	2.53	2.53	2.53	.60	10.7	3.9	124	13.4
1210		OVERLOAD	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK					
1210	ALL	APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.8	3.6	124	13.3
1210	ALL	119.5	120.5	120.5	2.5	2.53	2.53	2.5	2.5	2.5	.80	7.8	3.6	124	13.2
1234	ALL	119.5	120.5	120.5	2.5	2.53	2.53	2.5	2.5	2.5	.80	7.8	3.6	124	13.2
1235		APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.60	10.6	3.9	124	13.3
1235	OK	120	116.5	120	2.5	2.52	2.52	2.5	2.5	2.5	.60	10.6	3.9	124	13.2
1235	OK	120	116.5	120	2.5	2.52	2.52	2.5	2.5	2.5	.60	10.6	3.9	124	13.2
1235		OVERLOAD	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK					
1235	ALL	APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.8	3.6	124	13.4
1235	ALL	119.5	120.5	120.5	2.5	2.53	2.53	2.5	2.5	2.5	.80	7.8	3.6	124	13.4
1271		APPLY	120	120	2.5	2.52	2.52	2.5	2.5	2.5	.80	7.8	3.6	124	13.4

PASSED TEST

CIRCUIT INTERRUPTER (OVERLOAD) 512.2

BEGIN SCAN GROUP 1 22 JAN 88 10:59:53
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	734.82	DEG.	F
C	2	EXHAUST 2	754.89	DEG.	F
C	3	EXHAUST 3	756.76	DEG.	F
C	4	EXHAUST 4	795.61	DEG.	F
C	5	EXHAUST 5	844.19	DEG.	F
C	6	EXHAUST 6	773.86	DEG.	F
C	7	ENG. COOL. IN	198.56	DEG.	F
C	8	ENG. COOL. OUT	207.66	DEG.	F
C	9	OIL SUMP	215.96	DEG.	F
C	10	OIL GALLERY	216.98	DEG.	F
C	13	ENG. INTAKE	136.42	DEG.	F
C	14	RAD. TOP LEFT	168.13	DEG.	F
C	15	RAD. BTM LEFT	147.35	DEG.	F
C	16	RAD. TOP RIGHT	145.65	DEG.	F
C	17	RAD. BTM RIGHT	134.41	DEG.	F
C	18	GEN. AIR IN	121.39	DEG.	F
C	19	GEN. AIR OUT	139.22	DEG.	F
C	20	GEN. FRAME TOP	133.28	DEG.	F
C	21	GEN. FRAME BTM	128.13	DEG.	F
C	22	GEN. EXCITER	136.64	DEG.	F
C	23	GEN. VOLT. REG.	136.81	DEG.	F
C	24	CONTROL PANEL	136.48	DEG.	F
C	25	RELAY AREA	123.79	DEG.	F
C	26	BATTERY LEFT	139.17	DEG.	F
C	27	BATTERY RIGHT	138.98	DEG.	F
C	28	AIR IN SET	124.45	DEG.	F
C	29	FUEL TANK	184.96	DEG.	F
C	30	FUEL OUTLET	146.68	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:00:02

STOPPED SINGLE SCAN 22 JAN 88 11:00:02

BEGIN SCAN GROUP 1 22 JAN 88 11:10:00
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	868.41	DEG.	F
C	2	EXHAUST 2	768.25	DEG.	F
C	3	EXHAUST 3	764.85	DEG.	F
C	4	EXHAUST 4	882.78	DEG.	F
C	5	EXHAUST 5	858.88	DEG.	F
C	6	EXHAUST 6	787.21	DEG.	F
C	7	ENG. COOL. IN	203.72	DEG.	F
C	8	ENG. COOL. OUT	213.48	DEG.	F
C	9	OIL SUMP	229.89	DEG.	F
C	10	OIL GALLERY	229.84	DEG.	F
C	13	ENG. INTAKE	138.82	DEG.	F
C	14	RAD. TOP LEFT	163.57	DEG.	F
C	15	RAD. BTM LEFT	158.33	DEG.	F
C	16	RAD. TOP RIGHT	148.14	DEG.	F
C	17	RAD. BTM RIGHT	136.96	DEG.	F
C	18	GEN. AIR IN	121.62	DEG.	F
C	19	GEN. AIR OUT	141.18	DEG.	F
C	20	GEN. FRAME TOP	134.82	DEG.	F
C	21	GEN. FRAME BTM	128.61	DEG.	F
C	22	GEN. EXCITER	138.95	DEG.	F
C	23	GEN. VOLT. REG.	136.26	DEG.	F
C	24	CONTROL PANEL	137.79	DEG.	F
C	25	RELAY AREA	124.37	DEG.	F
C	26	BATTERY LEFT	144.47	DEG.	F
C	27	BATTERY RIGHT	133.42	DEG.	F
C	28	AIR IN SET	125.22	DEG.	F
C	29	FUEL TANK	186.72	DEG.	F
C	30	FUEL OUTLET	146.17	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:10:10

STOPPED SINGLE SCAN 22 JAN 88 11:10:10

BEGIN SCAN GROUP 1 22 JAN 88 11:19:58
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	736.23	DEG.	F
C	2	EXHAUST 2	759.84	DEG.	F
C	3	EXHAUST 3	765.71	DEG.	F
C	4	EXHAUST 4	882.57	DEG.	F
C	5	EXHAUST 5	854.17	DEG.	F
C	6	EXHAUST 6	788.24	DEG.	F
C	7	ENG. COOL. IN	204.84	DEG.	F
C	8	ENG. COOL. OUT	214.48	DEG.	F
C	9	OIL SUMP	234.25	DEG.	F
C	10	OIL GALLERY	235.14	DEG.	F
C	13	ENG. INTAKE	138.96	DEG.	F
C	14	RAD. TOP LEFT	163.85	DEG.	F
C	15	RAD. BTM LEFT	151.37	DEG.	F
C	16	RAD. TOP RIGHT	148.93	DEG.	F
C	17	RAD. BTM RIGHT	138.23	DEG.	F
C	18	GEN. AIR IN	121.88	DEG.	F
C	19	GEN. AIR OUT	142.18	DEG.	F
C	20	GEN. FRAME TOP	135.68	DEG.	F
C	21	GEN. FRAME BTM	129.16	DEG.	F
C	22	GEN. EXCITER	139.34	DEG.	F
C	23	GEN. VOLT. REG.	136.69	DEG.	F
C	24	CONTROL PANEL	138.69	DEG.	F
C	25	RELAY AREA	124.28	DEG.	F
C	26	BATTERY LEFT	146.11	DEG.	F
C	27	BATTERY RIGHT	135.15	DEG.	F
C	28	AIR IN SET	124.67	DEG.	F
C	29	FUEL TANK	188.41	DEG.	F
C	30	FUEL OUTLET	146.42	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:20:09

STOPPED SINGLE SCAN 22 JAN 88 11:20:09

BEGIN SCAN GROUP 1 22 JAN 88 11:29:58
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	888.38	DEG.	F
C	2	EXHAUST 2	768.15	DEG.	F
C	3	EXHAUST 3	768.11	DEG.	F
C	4	EXHAUST 4	885.11	DEG.	F
C	5	EXHAUST 5	851.88	DEG.	F
C	6	EXHAUST 6	787.23	DEG.	F
C	7	ENG. COOL. IN	205.85	DEG.	F
C	8	ENG. COOL. OUT	215.47	DEG.	F
C	9	OIL SUMP	237.39	DEG.	F
C	10	OIL GALLERY	237.48	DEG.	F
C	13	ENG. INTAKE	139.39	DEG.	F
C	14	RAD. TOP LEFT	164.95	DEG.	F
C	15	RAD. BTM LEFT	152.18	DEG.	F
C	16	RAD. TOP RIGHT	158.87	DEG.	F
C	17	RAD. BTM RIGHT	139.34	DEG.	F
C	18	GEN. AIR IN	122.71	DEG.	F
C	19	GEN. AIR OUT	143.47	DEG.	F
C	20	GEN. FRAME TOP	136.73	DEG.	F
C	21	GEN. FRAME BTM	129.63	DEG.	F
C	22	GEN. EXCITER	139.95	DEG.	F
C	23	GEN. VOLT. REG.	137.18	DEG.	F
C	24	CONTROL PANEL	138.78	DEG.	F
C	25	RELAY AREA	124.56	DEG.	F
C	26	BATTERY LEFT	147.87	DEG.	F
C	27	BATTERY RIGHT	136.44	DEG.	F
C	28	AIR IN SET	126.78	DEG.	F
C	29	FUEL TANK	118.83	DEG.	F
C	30	FUEL OUTLET	147.82	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:30:09

STOPPED SINGLE SCAN 22 JAN 88 11:30:09

BEGIN SCAN GROUP 1 22 JAN 88 11:31:15
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	829.98	DEG.	F
C	2	EXHAUST 2	783.75	DEG.	F
C	3	EXHAUST 3	787.97	DEG.	F
C	4	EXHAUST 4	827.24	DEG.	F
C	5	EXHAUST 5	878.18	DEG.	F
C	6	EXHAUST 6	818.86	DEG.	F
C	7	ENG. COOL. IN	285.92	DEG.	F
C	8	ENG. COOL. OUT	215.73	DEG.	F
C	9	OIL SUMP	235.84	DEG.	F
C	10	OIL GALLERY	237.61	DEG.	F
C	13	ENG. INTAKE	139.51	DEG.	F
C	14	RAD. TOP LEFT	165.89	DEG.	F
C	15	RAD. BTM LEFT	151.97	DEG.	F
C	16	RAD. TOP RIGHT	158.28	DEG.	F
C	17	RAD. BTM RIGHT	139.53	DEG.	F
C	18	GEN. AIR IN	123.86	DEG.	F
C	19	GEN. AIR OUT	143.88	DEG.	F
C	20	GEN. FRAME TOP	135.88	DEG.	F
C	21	GEN. FRAME BTM	129.68	DEG.	F
C	22	GEN. EXCITER	139.96	DEG.	F
C	23	GEN. VOLT. REG.	137.28	DEG.	F
C	24	CONTROL PANEL	138.94	DEG.	F
C	25	RELAY AREA	124.61	DEG.	F
C	26	BATTERY LEFT	147.19	DEG.	F
C	27	BATTERY RIGHT	136.51	DEG.	F
C	28	AIR IN SET	126.83	DEG.	F
C	29	FUEL TANK	118.23	DEG.	F
C	30	FUEL OUTLET	148.13	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:31:24

STOPPED SINGLE SCAN 22 JAN 88 11:31:24

BEGIN SCAN GROUP 1 22 JAN 88 11:36:02
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	853.55	DEG.	F
C	2	EXHAUST 2	803.89	DEG.	F
C	3	EXHAUST 3	812.79	DEG.	F
C	4	EXHAUST 4	846.81	DEG.	F
C	5	EXHAUST 5	897.81	DEG.	F
C	6	EXHAUST 6	828.85	DEG.	F
C	7	ENG. COOL. IN	288.82	DEG.	F
C	8	ENG. COOL. OUT	218.23	DEG.	F
C	9	OIL SUMP	238.89	DEG.	F
C	10	OIL GALLERY	238.82	DEG.	F
C	13	ENG. INTAKE	138.84	DEG.	F
C	14	RAD. TOP LEFT	166.83	DEG.	F
C	15	RAD. BTM LEFT	151.54	DEG.	F
C	16	RAD. TOP RIGHT	149.78	DEG.	F
C	17	RAD. BTM RIGHT	139.79	DEG.	F
C	18	GEN. AIR IN	128.86	DEG.	F
C	19	GEN. AIR OUT	145.34	DEG.	F
C	20	GEN. FRAME TOP	137.21	DEG.	F
C	21	GEN. FRAME BTM	129.88	DEG.	F
C	22	GEN. EXCITER	139.48	DEG.	F
C	23	GEN. VOLT. REG.	137.41	DEG.	F
C	24	CONTROL PANEL	138.97	DEG.	F
C	25	RELAY AREA	124.82	DEG.	F
C	26	BATTERY LEFT	147.46	DEG.	F
C	27	BATTERY RIGHT	136.83	DEG.	F
C	28	AIR IN SET	123.64	DEG.	F
C	29	FUEL TANK	111.88	DEG.	F
C	30	FUEL OUTLET	147.27	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:36:12

STOPPED SINGLE SCAN 22 JAN 88 11:36:12

BEGIN SCAN GROUP 1 22 JAN 88 11:44:12
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	721.51	DEG.	F
C	2	EXHAUST 2	674.68	DEG.	F
C	3	EXHAUST 3	672.72	DEG.	F
C	4	EXHAUST 4	714.38	DEG.	F
C	5	EXHAUST 5	763.82	DEG.	F
C	6	EXHAUST 6	687.92	DEG.	F
C	7	ENG. COOL. IN	186.68	DEG.	F
C	8	ENG. COOL. OUT	194.26	DEG.	F
C	9	OIL SUMP	232.58	DEG.	F
C	10	OIL GALLERY	233.64	DEG.	F
C	13	ENG. INTAKE	132.97	DEG.	F
C	14	RAD. TOP LEFT	153.87	DEG.	F
C	15	RAD. BTM LEFT	143.16	DEG.	F
C	16	RAD. TOP RIGHT	143.18	DEG.	F
C	17	RAD. BTM RIGHT	137.78	DEG.	F
C	18	GEN. AIR IN	119.94	DEG.	F
C	19	GEN. AIR OUT	141.55	DEG.	F
C	20	GEN. FRAME TOP	135.48	DEG.	F
C	21	GEN. FRAME BTM	128.47	DEG.	F
C	22	GEN. EXCITER	136.84	DEG.	F
C	23	GEN. VOLT. REG.	136.71	DEG.	F
C	24	CONTROL PANEL	137.87	DEG.	F
C	25	RELAY AREA	122.15	DEG.	F
C	26	BATTERY LEFT	145.29	DEG.	F
C	27	BATTERY RIGHT	135.26	DEG.	F
C	28	AIR IN SET	123.88	DEG.	F
C	29	FUEL TANK	112.88	DEG.	F
C	30	FUEL OUTLET	149.52	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:44:21

STOPPED SINGLE SCAN 22 JAN 88 11:44:21

BEGIN SCAN GROUP 1 22 JAN 88 11:58:05
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	801.24	DEG.	F
C	2	EXHAUST 2	768.42	DEG.	F
C	3	EXHAUST 3	767.88	DEG.	F
C	4	EXHAUST 4	804.14	DEG.	F
C	5	EXHAUST 5	848.12	DEG.	F
C	6	EXHAUST 6	788.22	DEG.	F
C	7	ENG. COOL. IN	284.86	DEG.	F
C	8	ENG. COOL. OUT	214.44	DEG.	F
C	9	OIL SUMP	234.36	DEG.	F
C	10	OIL GALLERY	235.41	DEG.	F
C	13	ENG. INTAKE	138.63	DEG.	F
C	14	RAD. TOP LEFT	163.72	DEG.	F
C	15	RAD. BTM LEFT	158.84	DEG.	F
C	16	RAD. TOP RIGHT	149.27	DEG.	F
C	17	RAD. BTM RIGHT	139.24	DEG.	F
C	18	GEN. AIR IN	121.94	DEG.	F
C	19	GEN. AIR OUT	143.87	DEG.	F
C	20	GEN. FRAME TOP	136.89	DEG.	F
C	21	GEN. FRAME BTM	138.25	DEG.	F
C	22	GEN. EXCITER	139.47	DEG.	F
C	23	GEN. VOLT. REG.	136.23	DEG.	F
C	24	CONTROL PANEL	137.81	DEG.	F
C	25	RELAY AREA	124.38	DEG.	F
C	26	BATTERY LEFT	146.13	DEG.	F
C	27	BATTERY RIGHT	136.67	DEG.	F
C	28	AIR IN SET	124.68	DEG.	F
C	29	FUEL TANK	113.94	DEG.	F
C	30	FUEL OUTLET	146.83	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:58:14

STOPPED SINGLE SCAN 22 JAN 88 11:58:14

BEGIN SCAN GROUP 1 22 JAN 88 11:59:33
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	882.51	DEG.	F
C	2	EXHAUST 2	757.11	DEG.	F
C	3	EXHAUST 3	766.12	DEG.	F
C	4	EXHAUST 4	883.25	DEG.	F
C	5	EXHAUST 5	848.54	DEG.	F
C	6	EXHAUST 6	788.99	DEG.	F
C	7	ENG. COOL. IN	284.68	DEG.	F
C	8	ENG. COOL. OUT	214.42	DEG.	F
C	9	OIL SUMP	235.88	DEG.	F
C	10	OIL GALLERY	235.73	DEG.	F
C	13	ENG. INTAKE	138.87	DEG.	F
C	14	RAD. TOP LEFT	164.37	DEG.	F
C	15	RAD. BTM LEFT	158.45	DEG.	F
C	16	RAD. TOP RIGHT	148.95	DEG.	F
C	17	RAD. BTM RIGHT	139.81	DEG.	F
C	18	GEN. AIR IN	121.37	DEG.	F
C	19	GEN. AIR OUT	143.65	DEG.	F
C	20	GEN. FRAME TOP	136.56	DEG.	F
C	21	GEN. FRAME BTM	129.81	DEG.	F
C	22	GEN. EXCITER	139.84	DEG.	F
C	23	GEN. VOLT. REG.	136.32	DEG.	F
C	24	CONTROL PANEL	138.25	DEG.	F
C	25	RELAY AREA	124.88	DEG.	F
C	26	BATTERY LEFT	146.38	DEG.	F
C	27	BATTERY RIGHT	136.98	DEG.	F
C	28	AIR IN SET	124.56	DEG.	F
C	29	FUEL TANK	114.28	DEG.	F
C	30	FUEL OUTLET	148.81	DEG.	F

END SCAN GROUP 1 22 JAN 88 11:59:42

STOPPED SINGLE SCAN 22 JAN 88 11:59:42

BEGIN SCAN GROUP 1 22 JAN 88 12:04:32
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	888.96	DEG.	F
C	2	EXHAUST 2	768.98	DEG.	F
C	3	EXHAUST 3	768.57	DEG.	F
C	4	EXHAUST 4	883.82	DEG.	F
C	5	EXHAUST 5	851.27	DEG.	F
C	6	EXHAUST 6	788.11	DEG.	F
C	7	ENG. COOL. IN	284.86	DEG.	F
C	8	ENG. COOL. OUT	214.58	DEG.	F
C	9	OIL SUMP	235.85	DEG.	F
C	10	OIL GALLERY	236.69	DEG.	F
C	13	ENG. INTAKE	137.71	DEG.	F
C	14	RAD. TOP LEFT	163.77	DEG.	F
C	15	RAD. BTM LEFT	158.67	DEG.	F
C	16	RAD. TOP RIGHT	149.85	DEG.	F
C	17	RAD. BTM RIGHT	139.21	DEG.	F
C	18	GEN. AIR IN	121.55	DEG.	F
C	19	GEN. AIR OUT	144.51	DEG.	F
C	20	GEN. FRAME TOP	136.87	DEG.	F
C	21	GEN. FRAME BTM	129.85	DEG.	F
C	22	GEN. EXCITER	138.85	DEG.	F
C	23	GEN. VOLT. REG.	136.48	DEG.	F
C	24	CONTROL PANEL	138.28	DEG.	F
C	25	RELAY AREA	123.51	DEG.	F
C	26	BATTERY LEFT	146.88	DEG.	F
C	27	BATTERY RIGHT	137.47	DEG.	F
C	28	AIR IN SET	125.53	DEG.	F
C	29	FUEL TANK	114.86	DEG.	F
C	30	FUEL OUTLET	148.18	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:04:41

STOPPED SINGLE SCAN 22 JAN 88 12:04:41

BEGIN SCAN GROUP 1 22 JAN 88 12:18:14
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	541.43	DEG.	F
C	2	EXHAUST 2	537.15	DEG.	F
C	3	EXHAUST 3	546.97	DEG.	F
C	4	EXHAUST 4	683.75	DEG.	F
C	5	EXHAUST 5	644.39	DEG.	F
C	6	EXHAUST 6	577.28	DEG.	F
C	7	ENG. COOL. IN	151.92	DEG.	F
C	8	ENG. COOL. OUT	199.38	DEG.	F
C	9	OIL SUMP	234.15	DEG.	F
C	10	OIL GALLERY	235.87	DEG.	F
C	13	ENG. INTAKE	135.46	DEG.	F
C	14	RAD. TOP LEFT	156.62	DEG.	F
C	15	RAD. BTM LEFT	145.71	DEG.	F
C	16	RAD. TOP RIGHT	145.86	DEG.	F
C	17	RAD. BTM RIGHT	138.12	DEG.	F
C	18	GEN. AIR IN	128.87	DEG.	F
C	19	GEN. AIR OUT	141.75	DEG.	F
C	20	GEN. FRAME TOP	135.87	DEG.	F
C	21	GEN. FRAME BTM	128.82	DEG.	F
C	22	GEN. EXCITER	137.87	DEG.	F
C	23	GEN. VOLT. REG.	136.43	DEG.	F
C	24	CONTROL PANEL	137.87	DEG.	F
C	25	RELAY AREA	123.81	DEG.	F
C	26	BATTERY LEFT	146.58	DEG.	F
C	27	BATTERY RIGHT	137.28	DEG.	F
C	28	AIR IN SET	122.59	DEG.	F
C	29	FUEL TANK	115.54	DEG.	F
C	30	FUEL OUTLET	148.23	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:18:23

STOPPED SINGLE SCAN 22 JAN 88 12:18:23

BEGIN SCAN GROUP 1 22 JAN 88 12:24:06
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	799.12	DEG.	F
C	2	EXHAUST 2	759.95	DEG.	F
C	3	EXHAUST 3	766.62	DEG.	F
C	4	EXHAUST 4	883.43	DEG.	F
C	5	EXHAUST 5	846.75	DEG.	F
C	6	EXHAUST 6	786.35	DEG.	F
C	7	ENG. COOL. IN	284.41	DEG.	F
C	8	ENG. COOL. OUT	214.12	DEG.	F
C	9	OIL SUMP	235.39	DEG.	F
C	10	OIL GALLERY	236.18	DEG.	F
C	13	ENG. INTAKE	137.48	DEG.	F
C	14	RAD. TOP LEFT	163.84	DEG.	F
C	15	RAD. BTM LEFT	158.34	DEG.	F
C	16	RAD. TOP RIGHT	148.94	DEG.	F
C	17	RAD. BTM RIGHT	138.87	DEG.	F
C	18	GEN. AIR IN	121.58	DEG.	F
C	19	GEN. AIR OUT	143.39	DEG.	F
C	20	GEN. FRAME TOP	136.87	DEG.	F
C	21	GEN. FRAME BTM	129.82	DEG.	F
C	22	GEN. EXCITER	138.72	DEG.	F
C	23	GEN. VOLT. REG.	136.88	DEG.	F
C	24	CONTROL PANEL	137.74	DEG.	F
C	25	RELAY AREA	123.41	DEG.	F
C	26	BATTERY LEFT	146.83	DEG.	F
C	27	BATTERY RIGHT	138.88	DEG.	F
C	28	AIR IN SET	124.95	DEG.	F
C	29	FUEL TANK	117.17	DEG.	F
C	30	FUEL OUTLET	146.93	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:24:16

STOPPED SINGLE SCAN 22 JAN 88 12:24:16

BEGIN SCAN GROUP 1 22 JAN 88 12:25:28
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	808.98	DEG.	F
C	2	EXHAUST 2	759.55	DEG.	F
C	3	EXHAUST 3	767.74	DEG.	F
C	4	EXHAUST 4	804.39	DEG.	F
C	5	EXHAUST 5	848.64	DEG.	F
C	6	EXHAUST 6	786.69	DEG.	F
C	7	ENG. COOL. IN	284.74	DEG.	F
C	8	ENG. COOL. OUT	214.38	DEG.	F
C	9	OIL SUMP	235.47	DEG.	F
C	10	OIL GALLERY	236.40	DEG.	F
C	13	ENG. INTAKE	137.62	DEG.	F
C	14	RAD. TOP LEFT	164.54	DEG.	F
C	15	RAD. BTM LEFT	158.17	DEG.	F
C	16	RAD. TOP RIGHT	148.79	DEG.	F
C	17	RAD. BTM RIGHT	139.87	DEG.	F
C	18	GEN. AIR IN	121.18	DEG.	F
C	19	GEN. AIR OUT	143.36	DEG.	F
C	20	GEN. FRAME TOP	136.32	DEG.	F
C	21	GEN. FRAME BTM	129.14	DEG.	F
C	22	GEN. EXCITER	138.95	DEG.	F
C	23	GEN. VOLT. REG.	136.85	DEG.	F
C	24	CONTROL PANEL	137.84	DEG.	F
C	25	RELAY AREA	123.49	DEG.	F
C	26	BATTERY LEFT	146.71	DEG.	F
C	27	BATTERY RIGHT	138.18	DEG.	F
C	28	AIR IN SET	124.73	DEG.	F
C	29	FUEL TANK	117.25	DEG.	F
C	30	FUEL OUTLET	147.45	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:25:37

STOPPED SINGLE SCAN 22 JAN 88 12:25:37

BEGIN SCAN GROUP 1 22 JAN 88 12:38:25
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	802.96	DEG.	F
C	2	EXHAUST 2	768.13	DEG.	F
C	3	EXHAUST 3	769.86	DEG.	F
C	4	EXHAUST 4	809.53	DEG.	F
C	5	EXHAUST 5	855.84	DEG.	F
C	6	EXHAUST 6	789.42	DEG.	F
C	7	ENG. COOL. IN	284.96	DEG.	F
C	8	ENG. COOL. OUT	214.69	DEG.	F
C	9	OIL SUMP	236.34	DEG.	F
C	10	OIL GALLERY	237.84	DEG.	F
C	13	ENG. INTAKE	137.73	DEG.	F
C	14	RAD. TOP LEFT	164.13	DEG.	F
C	15	RAD. BTM LEFT	158.45	DEG.	F
C	16	RAD. TOP RIGHT	148.78	DEG.	F
C	17	RAD. BTM RIGHT	139.18	DEG.	F
C	18	GEN. AIR IN	128.16	DEG.	F
C	19	GEN. AIR OUT	143.97	DEG.	F
C	20	GEN. FRAME TOP	136.44	DEG.	F
C	21	GEN. FRAME BTM	129.85	DEG.	F
C	22	GEN. EXCITER	139.82	DEG.	F
C	23	GEN. VOLT. REG.	136.23	DEG.	F
C	24	CONTROL PANEL	137.91	DEG.	F
C	25	RELAY AREA	123.48	DEG.	F
C	26	BATTERY LEFT	147.42	DEG.	F
C	27	BATTERY RIGHT	138.47	DEG.	F
C	28	AIR IN SET	124.32	DEG.	F
C	29	FUEL TANK	117.85	DEG.	F
C	30	FUEL OUTLET	147.30	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:38:34

STOPPED SINGLE SCAN 22 JAN 88 12:38:35

BEGIN SCAN GROUP 1 22 JAN 88 12:35:35
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	457.81	DEG.	F
C	2	EXHAUST 2	458.82	DEG.	F
C	3	EXHAUST 3	473.12	DEG.	F
C	4	EXHAUST 4	536.56	DEG.	F
C	5	EXHAUST 5	544.12	DEG.	F
C	6	EXHAUST 6	511.27	DEG.	F
C	7	ENG. COOL. IN	194.65	DEG.	F
C	8	ENG. COOL. OUT	281.89	DEG.	F
C	9	OIL SUMP	234.64	DEG.	F
C	10	OIL GALLERY	235.89	DEG.	F
C	13	ENG. INTAKE	134.53	DEG.	F
C	14	RAD. TOP LEFT	158.63	DEG.	F
C	15	RAD. BTM LEFT	147.62	DEG.	F
C	16	RAD. TOP RIGHT	146.43	DEG.	F
C	17	RAD. BTM RIGHT	138.73	DEG.	F
C	18	GEN. AIR IN	128.93	DEG.	F
C	19	GEN. AIR OUT	142.84	DEG.	F
C	20	GEN. FRAME TOP	136.38	DEG.	F
C	21	GEN. FRAME BTM	129.88	DEG.	F
C	22	GEN. EXCITER	138.48	DEG.	F
C	23	GEN. VOLT. REG.	136.33	DEG.	F
C	24	CONTROL PANEL	137.87	DEG.	F
C	25	RELAY AREA	123.38	DEG.	F
C	26	BATTERY LEFT	147.48	DEG.	F
C	27	BATTERY RIGHT	138.57	DEG.	F
C	28	AIR IN SET	124.72	DEG.	F
C	29	FUEL TANK	118.34	DEG.	F
C	30	FUEL OUTLET	148.45	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:35:45

STOPPED SINGLE SCAN 22 JAN 88 12:35:45

BEGIN SCAN GROUP 1 22 JAN 88 12:49:08
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	797.61	DEG.	F
C	2	EXHAUST 2	755.63	DEG.	F
C	3	EXHAUST 3	765.76	DEG.	F
C	4	EXHAUST 4	803.39	DEG.	F
C	5	EXHAUST 5	846.68	DEG.	F
C	6	EXHAUST 6	782.48	DEG.	F
C	7	ENG. COOL. IN	283.91	DEG.	F
C	8	ENG. COOL. OUT	213.48	DEG.	F
C	9	OIL SUMP			OPEN TC
C	10	OIL GALLERY	235.78	DEG.	F
C	13	ENG. INTAKE	136.85	DEG.	F
C	14	RAD. TOP LEFT	162.83	DEG.	F
C	15	RAD. BTM LEFT	149.87	DEG.	F
C	16	RAD. TOP RIGHT	148.34	DEG.	F
C	17	RAD. BTM RIGHT	138.73	DEG.	F
C	18	GEN. AIR IN	121.84	DEG.	F
C	19	GEN. AIR OUT	143.18	DEG.	F
C	20	GEN. FRAME TOP	135.82	DEG.	F
C	21	GEN. FRAME BTM	128.99	DEG.	F
C	22	GEN. EXCITER	138.33	DEG.	F
C	23	GEN. VOLT. REG.	135.79	DEG.	F
C	24	CONTROL PANEL	137.29	DEG.	F
C	25	RELAY AREA	123.88	DEG.	F
C	26	BATTERY LEFT	147.23	DEG.	F
C	27	BATTERY RIGHT	139.83	DEG.	F
C	28	AIR IN SET	124.86	DEG.	F
C	29	FUEL TANK	119.64	DEG.	F
C	30	FUEL OUTLET	147.89	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:49:18

STOPPED SINGLE SCAN 22 JAN 88 12:49:18

BEGIN SCAN GROUP 1 22 JAN 88 12:50:22
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	882.65	DEG.	F
C	2	EXHAUST 2	768.64	DEG.	F
C	3	EXHAUST 3	767.56	DEG.	F
C	4	EXHAUST 4	887.24	DEG.	F
C	5	EXHAUST 5	858.71	DEG.	F
C	6	EXHAUST 6	788.59	DEG.	F
C	7	ENG. COOL. IN	284.89	DEG.	F
C	8	ENG. COOL. OUT	213.88	DEG.	F
C	9	OIL SUMP	235.58	DEG.	F
C	10	OIL GALLERY	236.82	DEG.	F
C	13	ENG. INTAKE	137.84	DEG.	F
C	14	RAD. TOP LEFT	162.98	DEG.	F
C	15	RAD. BTM LEFT	158.18	DEG.	F
C	16	RAD. TOP RIGHT	148.62	DEG.	F
C	17	RAD. BTM RIGHT	138.78	DEG.	F
C	18	GEN. AIR IN	121.94	DEG.	F
C	19	GEN. AIR OUT	143.34	DEG.	F
C	20	GEN. FRAME TOP	138.88	DEG.	F
C	21	GEN. FRAME BTM	128.78	DEG.	F
C	22	GEN. EXCITER	138.58	DEG.	F
C	23	GEN. VOLT. REG.	135.85	DEG.	F
C	24	CONTROL PANEL	137.54	DEG.	F
C	25	RELAY AREA	123.16	DEG.	F
C	26	BATTERY LEFT	147.45	DEG.	F
C	27	BATTERY RIGHT	139.23	DEG.	F
C	28	AIR IN SET	125.85	DEG.	F
C	29	FUEL TANK	119.83	DEG.	F
C	30	FUEL OUTLET	147.93	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:58:31

STOPPED SINGLE SCAN 22 JAN 88 12:58:31

BEGIN SCAN GROUP 1 22 JAN 88 13:02:35
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	739.89	DEG.	F
C	2	EXHAUST 2	691.47	DEG.	F
C	3	EXHAUST 3	694.54	DEG.	F
C	4	EXHAUST 4	738.19	DEG.	F
C	5	EXHAUST 5	789.55	DEG.	F
C	6	EXHAUST 6	789.52	DEG.	F
C	7	ENG. COOL. IN	189.96	DEG.	F
C	8	ENG. COOL. OUT	198.88	DEG.	F
C	9	OIL SUMP	232.24	DEG.	F
C	10	OIL GALLERY	233.94	DEG.	F
C	13	ENG. INTAKE	134.79	DEG.	F
C	14	RAD. TOP LEFT	155.94	DEG.	F
C	15	RAD. BTM LEFT	145.84	DEG.	F
C	16	RAD. TOP RIGHT	144.75	DEG.	F
C	17	RAD. BTM RIGHT	138.28	DEG.	F
C	18	GEN. AIR IN	128.27	DEG.	F
C	19	GEN. AIR OUT	141.73	DEG.	F
C	20	GEN. FRAME TOP	135.86	DEG.	F
C	21	GEN. FRAME BTM	128.98	DEG.	F
C	22	GEN. EXCITER	137.81	DEG.	F
C	23	GEN. VOLT. REG.	136.28	DEG.	F
C	24	CONTROL PANEL	137.96	DEG.	F
C	25	RELAY AREA	123.36	DEG.	F
C	26	BATTERY LEFT	147.64	DEG.	F
C	27	BATTERY RIGHT	139.69	DEG.	F
C	28	AIR IN SET	124.32	DEG.	F
C	29	FUEL TANK	128.79	DEG.	F
C	30	FUEL OUTLET	148.57	DEG.	F

END SCAN GROUP 1 22 JAN 88 13:02:44

STOPPED SINGLE SCAN 22 JAN 88 13:02:44

BEGIN SCAN GROUP 1 22 JAN 88 12:55:16
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	828.13	DEG.	F
C	2	EXHAUST 2	779.18	DEG.	F
C	3	EXHAUST 3	798.83	DEG.	F
C	4	EXHAUST 4	831.24	DEG.	F
C	5	EXHAUST 5	877.28	DEG.	F
C	6	EXHAUST 6	811.62	DEG.	F
C	7	ENG. COOL. IN	286.34	DEG.	F
C	8	ENG. COOL. OUT	216.48	DEG.	F
C	9	OIL SUMP	237.19	DEG.	F
C	10	OIL GALLERY	237.17	DEG.	F
C	13	ENG. INTAKE	137.98	DEG.	F
C	14	RAD. TOP LEFT	165.22	DEG.	F
C	15	RAD. BTM LEFT	151.22	DEG.	F
C	16	RAD. TOP RIGHT	143.46	DEG.	F
C	17	RAD. BTM RIGHT	139.33	DEG.	F
C	18	GEN. AIR IN	121.42	DEG.	F
C	19	GEN. AIR OUT	144.44	DEG.	F
C	20	GEN. FRAME TOP	138.53	DEG.	F
C	21	GEN. FRAME BTM	129.33	DEG.	F
C	22	GEN. EXCITER	138.96	DEG.	F
C	23	GEN. VOLT. REG.	138.87	DEG.	F
C	24	CONTROL PANEL	137.69	DEG.	F
C	25	RELAY AREA	123.14	DEG.	F
C	26	BATTERY LEFT	147.88	DEG.	F
C	27	BATTERY RIGHT	139.76	DEG.	F
C	28	AIR IN SET	125.82	DEG.	F
C	29	FUEL TANK	128.38	DEG.	F
C	30	FUEL OUTLET	147.43	DEG.	F

END SCAN GROUP 1 22 JAN 88 12:55:25

STOPPED SINGLE SCAN 22 JAN 88 12:55:25

BEGIN SCAN GROUP 1 22 JAN 88 13:12:52
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	794.45	DEG.	F
C	2	EXHAUST 2	752.37	DEG.	F
C	3	EXHAUST 3	761.93	DEG.	F
C	4	EXHAUST 4	882.65	DEG.	F
C	5	EXHAUST 5	845.52	DEG.	F
C	6	EXHAUST 6	783.78	DEG.	F
C	7	ENG. COOL. IN	282.98	DEG.	F
C	8	ENG. COOL. OUT	212.58	DEG.	F
C	9	OIL SUMP			OPEN TC
C	10	OIL GALLERY	234.35	DEG.	F
C	13	ENG. INTAKE	136.82	DEG.	F
C	14	RAD. TOP LEFT	162.21	DEG.	F
C	15	RAD. BTM LEFT	148.76	DEG.	F
C	16	RAD. TOP RIGHT	147.57	DEG.	F
C	17	RAD. BTM RIGHT	138.22	DEG.	F
C	18	GEN. AIR IN	128.61	DEG.	F
C	19	GEN. AIR OUT	142.45	DEG.	F
C	20	GEN. FRAME TOP	135.25	DEG.	F
C	21	GEN. FRAME BTM	128.46	DEG.	F
C	22	GEN. EXCITER	137.85	DEG.	F
C	23	GEN. VOLT. REG.	135.39	DEG.	F
C	24	CONTROL PANEL	137.28	DEG.	F
C	25	RELAY AREA	122.84	DEG.	F
C	26	BATTERY LEFT	147.33	DEG.	F
C	27	BATTERY RIGHT	139.93	DEG.	F
C	28	AIR IN SET	124.11	DEG.	F
C	29	FUEL TANK	121.69	DEG.	F
C	30	FUEL OUTLET	146.58	DEG.	F

END SCAN GROUP 1 22 JAN 88 13:13:02

STOPPED SINGLE SCAN 22 JAN 88 13:13:02

BEGIN SCAN GROUP 1 22 JAN 88 13:17:45
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	794.55	DEG.	F
C	2	EXHAUST 2	755.38	DEG.	F
C	3	EXHAUST 3	761.44	DEG.	F
C	4	EXHAUST 4	882.86	DEG.	F
C	5	EXHAUST 5	846.88	DEG.	F
C	6	EXHAUST 6	783.59	DEG.	F
C	7	ENG. COOL. IN	283.27	DEG.	F
C	8	ENG. COOL. OUT	213.84	DEG.	F
C	9	OIL SUMP	234.59	DEG.	F
C	10	OIL GALLERY	235.27	DEG.	F
C	13	ENG. INTAKE	135.68	DEG.	F
C	14	RAD. TOP LEFT	161.88	DEG.	F
C	15	RAD. BTM LEFT	147.97	DEG.	F
C	16	RAD. TOP RIGHT	146.64	DEG.	F
C	17	RAD. BTM RIGHT	137.86	DEG.	F
C	18	GEN. AIR IN	118.58	DEG.	F
C	19	GEN. AIR OUT	141.59	DEG.	F
C	20	GEN. FRAME TOP	134.75	DEG.	F
C	21	GEN. FRAME BTM	127.86	DEG.	F
C	22	GEN. EXCITER	137.31	DEG.	F
C	23	GEN. VOLT. REG.	135.31	DEG.	F
C	24	CONTROL PANEL	137.12	DEG.	F
C	25	RELAY AREA	122.41	DEG.	F
C	26	BATTERY LEFT	147.87	DEG.	F
C	27	BATTERY RIGHT	148.22	DEG.	F
C	28	AIR IN SET	121.14	DEG.	F
C	29	FUEL TANK	122.87	DEG.	F
C	30	FUEL OUTLET	146.62	DEG.	F

END SCAN GROUP 1 22 JAN 88 13:17:54

STOPPED SINGLE SCAN 22 JAN 88 13:17:54

BEGIN SCAN GROUP 1 22 JAN 88 13:18:54
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	808.37	DEG.	F
C	2	EXHAUST 2	757.53	DEG.	F
C	3	EXHAUST 3	768.35	DEG.	F
C	4	EXHAUST 4	886.38	DEG.	F
C	5	EXHAUST 5	851.78	DEG.	F
C	6	EXHAUST 6	787.45	DEG.	F
C	7	ENG. COOL. IN	283.96	DEG.	F
C	8	ENG. COOL. OUT	213.55	DEG.	F
C	9	OIL SUMP	OPEN TC		
C	10	OIL GALLERY	235.48	DEG.	F
C	13	ENG. INTAKE	137.22	DEG.	F
C	14	RAD. TOP LEFT	163.61	DEG.	F
C	15	RAD. BTM LEFT	158.37	DEG.	F
C	16	RAD. TOP RIGHT	148.49	DEG.	F
C	17	RAD. BTM RIGHT	138.88	DEG.	F
C	18	GEN. AIR IN	121.84	DEG.	F
C	19	GEN. AIR OUT	143.84	DEG.	F
C	20	GEN. FRAME TOP	135.97	DEG.	F
C	21	GEN. FRAME BTM	129.86	DEG.	F
C	22	GEN. EXCITER	138.79	DEG.	F
C	23	GEN. VOLT. REG.	135.44	DEG.	F
C	24	CONTROL PANEL	137.32	DEG.	F
C	25	RELAY AREA	122.82	DEG.	F
C	26	BATTERY LEFT	147.97	DEG.	F
C	27	BATTERY RIGHT	148.33	DEG.	F
C	28	AIR IN SET	125.87	DEG.	F
C	29	FUEL TANK	122.28	DEG.	F
C	30	FUEL OUTLET	146.85	DEG.	F

END SCAN GROUP 1 22 JAN 88 13:19:04

STOPPED SINGLE SCAN 22 JAN 88 13:19:04

BEGIN SCAN GROUP 1 22 JAN 88 13:49:11
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	809.51	DEG.	F
C	2	EXHAUST 2	772.52	DEG.	F
C	3	EXHAUST 3	788.64	DEG.	F
C	4	EXHAUST 4	819.14	DEG.	F
C	5	EXHAUST 5	867.21	DEG.	F
C	6	EXHAUST 6	798.53	DEG.	F
C	7	ENG. COOL. IN	285.47	DEG.	F
C	8	ENG. COOL. OUT	215.48	DEG.	F
C	9	OIL SUMP	OPEN TC		
C	10	OIL GALLERY	238.38	DEG.	F
C	13	ENG. INTAKE	137.85	DEG.	F
C	14	RAD. TOP LEFT	163.73	DEG.	F
C	15	RAD. BTM LEFT	158.86	DEG.	F
C	16	RAD. TOP RIGHT	148.39	DEG.	F
C	17	RAD. BTM RIGHT	139.19	DEG.	F
C	18	GEN. AIR IN	118.66	DEG.	F
C	19	GEN. AIR OUT	144.55	DEG.	F
C	20	GEN. FRAME TOP	136.92	DEG.	F
C	21	GEN. FRAME BTM	128.63	DEG.	F
C	22	GEN. EXCITER	138.65	DEG.	F
C	23	GEN. VOLT. REG.	136.12	DEG.	F
C	24	CONTROL PANEL	137.64	DEG.	F
C	25	RELAY AREA	122.84	DEG.	F
C	26	BATTERY LEFT	149.74	DEG.	F
C	27	BATTERY RIGHT	142.26	DEG.	F
C	28	AIR IN SET	123.36	DEG.	F
C	29	FUEL TANK	124.41	DEG.	F
C	30	FUEL OUTLET	146.95	DEG.	F

END SCAN GROUP 1 22 JAN 88 13:49:28

STOPPED SINGLE SCAN 22 JAN 88 13:49:28

BEGIN SCAN GROUP 1 22 JAN 88 14:19:08
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	812.61	DEG.	F
C	2	EXHAUST 2	775.55	DEG.	F
C	3	EXHAUST 3	782.76	DEG.	F
C	4	EXHAUST 4	825.97	DEG.	F
C	5	EXHAUST 5	866.95	DEG.	F
C	6	EXHAUST 6	883.28	DEG.	F
C	7	ENG. COOL. IN	287.17	DEG.	F
C	8	ENG. COOL. OUT	217.87	DEG.	F
C	9	OIL SUMP	233.77	DEG.	F
C	10	OIL GALLERY	239.97	DEG.	F
C	13	ENG. INTAKE	138.51	DEG.	F
C	14	RAD. TOP LEFT	165.95	DEG.	F
C	15	RAD. BTM LEFT	151.86	DEG.	F
C	16	RAD. TOP RIGHT	158.44	DEG.	F
C	17	RAD. BTM RIGHT	141.42	DEG.	F
C	18	GEN. AIR IN	121.21	DEG.	F
C	19	GEN. AIR OUT	146.93	DEG.	F
C	20	GEN. FRAME TOP	138.97	DEG.	F
C	21	GEN. FRAME BTM	138.95	DEG.	F
C	22	GEN. EXCITER	148.13	DEG.	F
C	23	GEN. VOLT. REG.	137.38	DEG.	F
C	24	CONTROL PANEL	139.11	DEG.	F
C	25	RELAY AREA	124.85	DEG.	F
C	26	BATTERY LEFT	151.86	DEG.	F
C	27	BATTERY RIGHT	144.78	DEG.	F
C	28	AIR IN SET	124.88	DEG.	F
C	29	FUEL TANK	126.64	DEG.	F
C	30	FUEL OUTLET	149.45	DEG.	F

END SCAN GROUP 1 22 JAN 88 14:19:09

STOPPED SINGLE SCAN 22 JAN 88 14:19:09

BEGIN SCAN GROUP 1 22 JAN 88 14:48:59
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	815.22	DEG.	F
C	2	EXHAUST 2	774.63	DEG.	F
C	3	EXHAUST 3	784.71	DEG.	F
C	4	EXHAUST 4	826.88	DEG.	F
C	5	EXHAUST 5	873.28	DEG.	F
C	6	EXHAUST 6	884.57	DEG.	F
C	7	ENG. COOL. IN	287.41	DEG.	F
C	8	ENG. COOL. OUT	217.32	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	248.34	DEG.	F
C	13	ENG. INTAKE	138.75	DEG.	F
C	14	RAD. TOP LEFT	165.88	DEG.	F
C	15	RAD. BTM LEFT	151.96	DEG.	F
C	16	RAD. TOP RIGHT	158.89	DEG.	F
C	17	RAD. BTM RIGHT	141.98	DEG.	F
C	18	GEN. AIR IN	121.94	DEG.	F
C	19	GEN. AIR OUT	147.72	DEG.	F
C	20	GEN. FRAME TOP	139.69	DEG.	F
C	21	GEN. FRAME BTM	131.38	DEG.	F
C	22	GEN. EXCITER	148.51	DEG.	F
C	23	GEN. VOLT. REG.	137.79	DEG.	F
C	24	CONTROL PANEL	139.45	DEG.	F
C	25	RELAY AREA	124.36	DEG.	F
C	26	BATTERY LEFT	153.85	DEG.	F
C	27	BATTERY RIGHT	147.82	DEG.	F
C	28	AIR IN SET	125.66	DEG.	F
C	29	FUEL TANK	128.99	DEG.	F
C	30	FUEL OUTLET	149.65	DEG.	F

END SCAN GROUP 1 22 JAN 88 14:49:08

STOPPED SINGLE SCAN 22 JAN 88 14:49:08

BEGIN SCAN GROUP 1 22 JAN 88 15:18:58
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	816.62	DEG.	F
C	2	EXHAUST 2	779.78	DEG.	F
C	3	EXHAUST 3	786.36	DEG.	F
C	4	EXHAUST 4	825.58	DEG.	F
C	5	EXHAUST 5	873.66	DEG.	F
C	6	EXHAUST 6	886.87	DEG.	F
C	7	ENG. COOL. IN	287.82	DEG.	F
C	8	ENG. COOL. OUT	217.71	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	248.54	DEG.	F
C	13	ENG. INTAKE	139.42	DEG.	F
C	14	RAD. TOP LEFT	166.44	DEG.	F
C	15	RAD. BTM LEFT	152.26	DEG.	F
C	16	RAD. TOP RIGHT	151.38	DEG.	F
C	17	RAD. BTM RIGHT	142.45	DEG.	F
C	18	GEN. AIR IN	122.92	DEG.	F
C	19	GEN. AIR OUT	148.17	DEG.	F
C	20	GEN. FRAME TOP	139.79	DEG.	F
C	21	GEN. FRAME BTM	132.29	DEG.	F
C	22	GEN. EXCITER	148.62	DEG.	F
C	23	GEN. VOLT. REG.	137.75	DEG.	F
C	24	CONTROL PANEL	139.29	DEG.	F
C	25	RELAY AREA	124.79	DEG.	F
C	26	BATTERY LEFT	153.67	DEG.	F
C	27	BATTERY RIGHT	148.99	DEG.	F
C	28	AIR IN SET	125.38	DEG.	F
C	29	FUEL TANK	131.87	DEG.	F
C	30	FUEL OUTLET	158.61	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:19:08

STOPPED SINGLE SCAN 22 JAN 88 15:19:08

TEST DATA

ITEM 30 Kw / 60 Hz
GENERATOR SET
MANUAL
 MFR. JOHN E. HILKINSURTH
 MODEL NO. MAP 005A
 SERIAL NO. K10 5841

NTS
 National Technical Systems
 Scientific Services Group
 PO. Box 30
 Herndon, Virginia 22071
 Tel: 703 752 5300
 Method 619.2
 Voltage ΔP + RISE

REF. NO. MIL-STD 705
 SHEET 1 OF 1
 DATE 22 JAN 1988
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER KN/ΔJ/GC

INST TIME	LOAD STEP NO.	6028 D VOLTAGE			6028 D AMPERES X10			6028 D KILOWATTS X10			POWER FACTOR	FREQ. Hz	6028 D EXCITER FIELD		AMB. TEMP. °F	PRESS IN AIR
		L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC RMS	L2-L0 AC RMS	L3-L0 AC RMS	L1-L0 KW	L2-L0 KW	L3-L0 KW			VOLTS VDC	AMPS DCA		
1524		START	START	START	START	START	START									
1526	R/L	119.5	120.5	120.5	2.45	2.52	2.58	.245	.25	.25	.80	60.3	10.0	3.05	124	13.2
1530	R/L	119.5	120.5	120	2.5	2.53	2.52	.249	.257	.257	.80	60.3	10.0	3.6	124	13.3
1536	R/L	119.5	120.5	120	2.5	2.53	2.53	.248	.25	.25	.80	60.3	9.9	3.6	125	13.4
1538	R/L	119.5	120.5	120	2.5	2.52	2.57	.248	.257	.25	.80	60.3	9.9	3.6	123	13.5
1539	R/L	121	121.5	121	2.5	2.54	2.53	.248	.25	.25	.80	60.3	9.9	3.6	123	13.5
1537	R/L	119.5	120.5	120	2.5	2.54	2.53	.248	.25	.25	.80	60.3	9.9	3.6	123	13.5
1538	R/L	121	121	121	2.5	2.53	2.53	.248	.257	.257	.80	60.3	9.9	3.6	124	13.7
1539	R/L	119.5	120.5	120	2.5	2.53	2.53	.248	.257	.257	.80	60.3	9.9	3.6	124	13.7
1600	R/L	121	121.1	121.1	2.5	2.54	2.53	.248	.25	.25	.80	60.3	9.9	3.6	125	14.3
1600	R/L	119.5	120.5	120	2.5	2.54	2.53	.248	.25	.25	.80	60.3	9.9	3.6	125	14.3
1600		END	OK	TEST	START	START	START									

DISTORTION: NOTED IN VOLTAGE WAVEFORMS UPON APPLICATION OF RATED LOAD

8-40

NTS

GENERATOR SET

MODIFIED

MEGR. JOHN R HOLLINGSWORTH

MODEL NO. ME8 005A

SERIAL NO. K205841

REF. NO. MK STD 205

SHEET 10 OF 10

DATE 6 FEB 1988

JOB NO. 55-2140

PROJ. ENGR.

RECORDED/OBSERVER

**National
Technical
Systems**

**Scientific
Services
Group**

**Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300**

VOLTAGE DIP & RISE (Calculation Summary)

[illegible]

BEGIN SCAN GROUP 1 22 JAN 88 15:26:19
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	794.50	DEG.	F
C	2	EXHAUST 2	754.54	DEG.	F
C	3	EXHAUST 3	759.99	DEG.	F
C	4	EXHAUST 4	797.27	DEG.	F
C	5	EXHAUST 5	842.86	DEG.	F
C	6	EXHAUST 6	771.60	DEG.	F
C	7	ENG. COOL. IN	284.89	DEG.	F
C	8	ENG. COOL. OUT	213.72	DEG.	F
C	9	OIL SUMP	235.52	DEG.	F
C	10	OIL GALLERY	236.40	DEG.	F
C	13	ENG. INTAKE	139.12	DEG.	F
C	14	RAD. TOP LEFT	163.93	DEG.	F
C	15	RAD. BTM LEFT	158.46	DEG.	F
C	16	RAD. TOP RIGHT	149.87	DEG.	F
C	17	RAD. BTM RIGHT	141.93	DEG.	F
C	18	GEN. AIR IN	121.70	DEG.	F
C	19	GEN. AIR OUT	146.67	DEG.	F
C	20	GEN. FRAME TOP	139.92	DEG.	F
C	21	GEN. FRAME BTM	132.99	DEG.	F
C	22	GEN. EXCITER	139.71	DEG.	F
C	23	GEN. VOLT. REG.	138.47	DEG.	F
C	24	CONTROL PANEL	138.93	DEG.	F
C	25	RELAY AREA	124.41	DEG.	F
C	26	BATTERY LEFT	153.32	DEG.	F
C	27	BATTERY RIGHT	149.33	DEG.	F
C	28	AIR IN SET	124.86	DEG.	F
C	29	FUEL TANK	131.47	DEG.	F
C	30	FUEL OUTLET	152.89	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:26:27

STOPPED SINGLE SCAN 22 JAN 88 15:26:27

BEGIN SCAN GROUP 1 22 JAN 88 15:36:05
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	808.42	DEG.	F
C	2	EXHAUST 2	768.17	DEG.	F
C	3	EXHAUST 3	767.13	DEG.	F
C	4	EXHAUST 4	887.26	DEG.	F
C	5	EXHAUST 5	853.45	DEG.	F
C	6	EXHAUST 6	785.86	DEG.	F
C	7	ENG. COOL. IN	285.86	DEG.	F
C	8	ENG. COOL. OUT	214.70	DEG.	F
C	9	OIL SUMP	236.89	DEG.	F
C	10	OIL GALLERY	237.27	DEG.	F
C	13	ENG. INTAKE	137.25	DEG.	F
C	14	RAD. TOP LEFT	164.89	DEG.	F
C	15	RAD. BTM LEFT	158.22	DEG.	F
C	16	RAD. TOP RIGHT	149.41	DEG.	F
C	17	RAD. BTM RIGHT	141.27	DEG.	F
C	18	GEN. AIR IN	122.28	DEG.	F
C	19	GEN. AIR OUT	145.59	DEG.	F
C	20	GEN. FRAME TOP	137.57	DEG.	F
C	21	GEN. FRAME BTM	138.77	DEG.	F
C	22	GEN. EXCITER	139.45	DEG.	F
C	23	GEN. VOLT. REG.	137.58	DEG.	F
C	24	CONTROL PANEL	138.42	DEG.	F
C	25	RELAY AREA	123.58	DEG.	F
C	26	BATTERY LEFT	152.74	DEG.	F
C	27	BATTERY RIGHT	158.53	DEG.	F
C	28	AIR IN SET	124.85	DEG.	F
C	29	FUEL TANK	131.14	DEG.	F
C	30	FUEL OUTLET	158.67	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:36:14

STOPPED SINGLE SCAN 22 JAN 88 15:36:14

BEGIN SCAN GROUP 1 22 JAN 88 15:45:1
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	881.57	DEG.	F
C	2	EXHAUST 2	761.57	DEG.	F
C	3	EXHAUST 3	769.95	DEG.	F
C	4	EXHAUST 4	889.52	DEG.	F
C	5	EXHAUST 5	854.38	DEG.	F
C	6	EXHAUST 6	786.51	DEG.	F
C	7	ENG. COOL. IN	285.52	DEG.	F
C	8	ENG. COOL. OUT	215.87	DEG.	F
C	9	OIL SUMP	236.39	DEG.	F
C	10	OIL GALLERY	237.44	DEG.	F
C	13	ENG. INTAKE	138.16	DEG.	F
C	14	RAD. TOP LEFT	164.67	DEG.	F
C	15	RAD. BTM LEFT	151.11	DEG.	F
C	16	RAD. TOP RIGHT	158.84	DEG.	F
C	17	RAD. BTM RIGHT	141.27	DEG.	F
C	18	GEN. AIR IN	123.18	DEG.	F
C	19	GEN. AIR OUT	145.44	DEG.	F
C	20	GEN. FRAME TOP	137.35	DEG.	F
C	21	GEN. FRAME BTM	138.74	DEG.	F
C	22	GEN. EXCITER	139.54	DEG.	F
C	23	GEN. VOLT. REG.	136.84	DEG.	F
C	24	CONTROL PANEL	138.26	DEG.	F
C	25	RELAY AREA	123.48	DEG.	F
C	26	BATTERY LEFT	152.73	DEG.	F
C	27	BATTERY RIGHT	158.84	DEG.	F
C	28	AIR IN SET	125.63	DEG.	F
C	29	FUEL TANK	131.83	DEG.	F
C	30	FUEL OUTLET	149.62	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:45:1

STOPPED SINGLE SCAN 22 JAN 88 15:45:1

BEGIN SCAN GROUP 1 22 JAN 88 15:55:1
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	884.97	DEG.	F
C	2	EXHAUST 2	762.94	DEG.	F
C	3	EXHAUST 3	769.98	DEG.	F
C	4	EXHAUST 4	812.35	DEG.	F
C	5	EXHAUST 5	853.76	DEG.	F
C	6	EXHAUST 6	785.77	DEG.	F
C	7	ENG. COOL. IN	285.79	DEG.	F
C	8	ENG. COOL. OUT	215.58	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	237.86	DEG.	F
C	13	ENG. INTAKE	138.66	DEG.	F
C	14	RAD. TOP LEFT	165.87	DEG.	F
C	15	RAD. BTM LEFT	158.51	DEG.	F
C	16	RAD. TOP RIGHT	149.64	DEG.	F
C	17	RAD. BTM RIGHT	141.14	DEG.	F
C	18	GEN. AIR IN	121.73	DEG.	F
C	19	GEN. AIR OUT	144.84	DEG.	F
C	20	GEN. FRAME TOP	136.95	DEG.	F
C	21	GEN. FRAME BTM	138.95	DEG.	F
C	22	GEN. EXCITER	139.56	DEG.	F
C	23	GEN. VOLT. REG.	137.88	DEG.	F
C	24	CONTROL PANEL	138.35	DEG.	F
C	25	RELAY AREA	123.54	DEG.	F
C	26	BATTERY LEFT	153.84	DEG.	F
C	27	BATTERY RIGHT	158.61	DEG.	F
C	28	AIR IN SET	123.64	DEG.	F
C	29	FUEL TANK	138.95	DEG.	F
C	30	FUEL OUTLET	158.14	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:55:1

STOPPED SINGLE SCAN 22 JAN 88 15:55:1

BEGIN SCAN GROUP 1 22 JAN 88 15:56:30
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	627.87	DEG.	F
C	2	EXHAUST 2	589.59	DEG.	F
C	3	EXHAUST 3	599.15	DEG.	F
C	4	EXHAUST 4	655.29	DEG.	F
C	5	EXHAUST 5	691.81	DEG.	F
C	6	EXHAUST 6	627.14	DEG.	F
C	7	ENG. COOL. IN	285.35	DEG.	F
C	8	ENG. COOL. OUT	214.85	DEG.	F
C	9	OIL SUMP	236.89	DEG.	F
C	10	OIL GALLERY	237.99	DEG.	F
C	13	ENG. INTAKE	137.97	DEG.	F
C	14	RAD. TOP LEFT	163.74	DEG.	F
C	15	RAD. BTM LEFT	149.78	DEG.	F
C	16	RAD. TOP RIGHT	149.12	DEG.	F
C	17	RAD. BTM RIGHT	148.94	DEG.	F
C	18	GEN. AIR IN	121.25	DEG.	F
C	19	GEN. AIR OUT	144.32	DEG.	F
C	20	GEN. FRAME TOP	136.62	DEG.	F
C	21	GEN. FRAME BTM	138.78	DEG.	F
C	22	GEN. EXCITER	139.27	DEG.	F
C	23	GEN. VOLT. REG.	136.93	DEG.	F
C	24	CONTROL PANEL	138.16	DEG.	F
C	25	RELAY AREA	123.22	DEG.	F
C	26	BATTERY LEFT	152.99	DEG.	F
C	27	BATTERY RIGHT	158.59	DEG.	F
C	28	AIR IN SET	123.54	DEG.	F
C	29	FUEL TANK	138.95	DEG.	F
C	30	FUEL OUTLET	149.47	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:56:48

STOPPED SINGLE SCAN 22 JAN 88 15:56:48

BEGIN SCAN GROUP 1 22 JAN 88 15:57:26
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	598.49	DEG.	F
C	2	EXHAUST 2	583.88	DEG.	F
C	3	EXHAUST 3	608.84	DEG.	F
C	4	EXHAUST 4	668.71	DEG.	F
C	5	EXHAUST 5	674.58	DEG.	F
C	6	EXHAUST 6	634.48	DEG.	F
C	7	ENG. COOL. IN	288.11	DEG.	F
C	8	ENG. COOL. OUT	288.36	DEG.	F
C	9	OIL SUMP	236.55	DEG.	F
C	10	OIL GALLERY	237.25	DEG.	F
C	13	ENG. INTAKE	137.16	DEG.	F
C	14	RAD. TOP LEFT	161.56	DEG.	F
C	15	RAD. BTM LEFT	148.89	DEG.	F
C	16	RAD. TOP RIGHT	148.83	DEG.	F
C	17	RAD. BTM RIGHT	148.56	DEG.	F
C	18	GEN. AIR IN	122.58	DEG.	F
C	19	GEN. AIR OUT	143.61	DEG.	F
C	20	GEN. FRAME TOP	136.25	DEG.	F
C	21	GEN. FRAME BTM	138.59	DEG.	F
C	22	GEN. EXCITER	138.57	DEG.	F
C	23	GEN. VOLT. REG.	136.88	DEG.	F
C	24	CONTROL PANEL	138.11	DEG.	F
C	25	RELAY AREA	122.98	DEG.	F
C	26	BATTERY LEFT	152.72	DEG.	F
C	27	BATTERY RIGHT	158.47	DEG.	F
C	28	AIR IN SET	123.88	DEG.	F
C	29	FUEL TANK	138.98	DEG.	F
C	30	FUEL OUTLET	158.28	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:57:35

STOPPED SINGLE SCAN 22 JAN 88 15:57:35

BEGIN SCAN GROUP 1 22 JAN 88 15:58:20
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	734.18	DEG.	F
C	2	EXHAUST 2	685.39	DEG.	F
C	3	EXHAUST 3	698.88	DEG.	F
C	4	EXHAUST 4	735.63	DEG.	F
C	5	EXHAUST 5	786.63	DEG.	F
C	6	EXHAUST 6	786.21	DEG.	F
C	7	ENG. COOL. IN	199.76	DEG.	F
C	8	ENG. COOL. OUT	288.68	DEG.	F
C	9	OIL SUMP	235.68	DEG.	F
C	10	OIL GALLERY	236.75	DEG.	F
C	13	ENG. INTAKE	137.16	DEG.	F
C	14	RAD. TOP LEFT	161.84	DEG.	F
C	15	RAD. BTM LEFT	148.96	DEG.	F
C	16	RAD. TOP RIGHT	148.22	DEG.	F
C	17	RAD. BTM RIGHT	148.61	DEG.	F
C	18	GEN. AIR IN	123.16	DEG.	F
C	19	GEN. AIR OUT	143.87	DEG.	F
C	20	GEN. FRAME TOP	136.21	DEG.	F
C	21	GEN. FRAME BTM	138.68	DEG.	F
C	22	GEN. EXCITER	138.83	DEG.	F
C	23	GEN. VOLT. REG.	136.95	DEG.	F
C	24	CONTROL PANEL	138.33	DEG.	F
C	25	RELAY AREA	122.91	DEG.	F
C	26	BATTERY LEFT	152.82	DEG.	F
C	27	BATTERY RIGHT	158.49	DEG.	F
C	28	AIR IN SET	123.88	DEG.	F
C	29	FUEL TANK	138.95	DEG.	F
C	30	FUEL OUTLET	158.44	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:58:36

STOPPED SINGLE SCAN 22 JAN 88 15:58:36

BEGIN SCAN GROUP 1 22 JAN 88 15:59:00
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	537.24	DEG.	F
C	2	EXHAUST 2	523.44	DEG.	F
C	3	EXHAUST 3	542.61	DEG.	F
C	4	EXHAUST 4	686.24	DEG.	F
C	5	EXHAUST 5	617.98	DEG.	F
C	6	EXHAUST 6	579.29	DEG.	F
C	7	ENG. COOL. IN	197.64	DEG.	F
C	8	ENG. COOL. OUT	285.56	DEG.	F
C	9	OIL SUMP	235.76	DEG.	F
C	10	OIL GALLERY	236.36	DEG.	F
C	13	ENG. INTAKE	137.26	DEG.	F
C	14	RAD. TOP LEFT	168.48	DEG.	F
C	15	RAD. BTM LEFT	148.28	DEG.	F
C	16	RAD. TOP RIGHT	147.85	DEG.	F
C	17	RAD. BTM RIGHT	148.68	DEG.	F
C	18	GEN. AIR IN	124.83	DEG.	F
C	19	GEN. AIR OUT	143.68	DEG.	F
C	20	GEN. FRAME TOP	136.38	DEG.	F
C	21	GEN. FRAME BTM	138.61	DEG.	F
C	22	GEN. EXCITER	138.98	DEG.	F
C	23	GEN. VOLT. REG.	136.87	DEG.	F
C	24	CONTROL PANEL	138.23	DEG.	F
C	25	RELAY AREA	122.87	DEG.	F
C	26	BATTERY LEFT	152.46	DEG.	F
C	27	BATTERY RIGHT	149.56	DEG.	F
C	28	AIR IN SET	124.64	DEG.	F
C	29	FUEL TANK	138.98	DEG.	F
C	30	FUEL OUTLET	158.44	DEG.	F

END SCAN GROUP 1 22 JAN 88 15:59:13

STOPPED SINGLE SCAN 22 JAN 88 15:59:13

BEGIN SCAN GROUP 1 22 JAN 88 16:00:00
38 KW/60 HZ GEN SET S/N K20 5841

C	1 EXHAUST 1	664.99 DEG.	F
C	2 EXHAUST 2	617.31 DEG.	F
C	3 EXHAUST 3	621.46 DEG.	F
C	4 EXHAUST 4	673.72 DEG.	F
C	5 EXHAUST 5	722.68 DEG.	F
C	6 EXHAUST 6	648.96 DEG.	F
C	7 ENG. COOL. IN	197.84 DEG.	F
C	8 ENG. COOL. OUT	206.40 DEG.	F
C	9 OIL SUMP	234.55 DEG.	F
C	10 OIL GALLERY	235.78 DEG.	F
C	13 ENG. INTAKE	137.01 DEG.	F
C	14 RAD. TOP LEFT	160.87 DEG.	F
C	15 RAD. BTM LEFT	148.00 DEG.	F
C	16 RAD. TOP RIGHT	147.06 DEG.	F
C	17 RAD. BTM RIGHT	148.58 DEG.	F
C	18 GEN. AIR IN	124.27 DEG.	F
C	19 GEN. AIR OUT	143.70 DEG.	F
C	20 GEN. FRAME TOP	136.19 DEG.	F
C	21 GEN. FRAME BTM	130.82 DEG.	F
C	22 GEN. EXCITER	138.75 DEG.	F
C	23 GEN. VOLT. REG.	136.84 DEG.	F
C	24 CONTROL PANEL	138.34 DEG.	F
C	25 RELAY AREA	122.05 DEG.	F
C	26 BATTERY LEFT	152.40 DEG.	F
C	27 BATTERY RIGHT	149.69 DEG.	F
C	28 AIR IN SET	123.94 DEG.	F
C	29 FUEL TANK	138.94 DEG.	F
C	30 FUEL OUTLET	150.75 DEG.	F

END SCAN GROUP 1 22 JAN 88 16:00:10

STOPPED SINGLE SCAN 22 JAN 88 16:00:10

BEGIN SCAN GROUP 1 22 JAN 88 16:00:45
38 KW/60 HZ GEN SET S/N K20 5841

C	1 EXHAUST 1	509.43 DEG.	F
C	2 EXHAUST 2	497.33 DEG.	F
C	3 EXHAUST 3	515.76 DEG.	F
C	4 EXHAUST 4	581.17 DEG.	F
C	5 EXHAUST 5	591.80 DEG.	F
C	6 EXHAUST 6	552.94 DEG.	F
C	7 ENG. COOL. IN	195.77 DEG.	F
C	8 ENG. COOL. OUT	203.41 DEG.	F
C	9 OIL SUMP	233.98 DEG.	F
C	10 OIL GALLERY	235.29 DEG.	F
C	13 ENG. INTAKE	137.18 DEG.	F
C	14 RAD. TOP LEFT	159.95 DEG.	F
C	15 RAD. BTM LEFT	148.02 DEG.	F
C	16 RAD. TOP RIGHT	147.73 DEG.	F
C	17 RAD. BTM RIGHT	148.57 DEG.	F
C	18 GEN. AIR IN	124.99 DEG.	F
C	19 GEN. AIR OUT	143.57 DEG.	F
C	20 GEN. FRAME TOP	136.42 DEG.	F
C	21 GEN. FRAME BTM	131.05 DEG.	F
C	22 GEN. EXCITER	139.00 DEG.	F
C	23 GEN. VOLT. REG.	136.86 DEG.	F
C	24 CONTROL PANEL	138.21 DEG.	F
C	25 RELAY AREA	122.76 DEG.	F
C	26 BATTERY LEFT	152.02 DEG.	F
C	27 BATTERY RIGHT	149.52 DEG.	F
C	28 AIR IN SET	125.65 DEG.	F
C	29 FUEL TANK	138.88 DEG.	F
C	30 FUEL OUTLET	150.45 DEG.	F

END SCAN GROUP 1 22 JAN 88 16:00:55

STOPPED SINGLE SCAN 22 JAN 88 16:00:55

TEST DATA

MTS

ITEM 30 Kw / 60 Hz

GENERATOR SET

MODIFIED

MPGR. John R. Hollingsworth

MODEL NO. MEP 005A

SERIAL NO. K20 5841

National Technical Systems
Scientific Services Group
Testing Division
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705; 511.1

SHEET 1 OF 1

DATE 22 JAN 1988

JOB NO. 555-2140

PROJ. ENCR.

REORDER/OBSERVER KN/6C/BS

REGULATOR RANGE TEST

INST TIME	LOAD STEP NO.	E 6028 D VOLTAGE				E 6040 D AMPERES				E 6230 D KILOWATTS				E 6240 D POWER FACTOR		E 6270 D EXCITER		E 6280 D FIELD		AMB. TEMP. °F	REPS
		4-1	4-2	VAC	VAC	4-1	4-2	4-3	4-4	4-1	4-2	4-3	4-4	PF	PF	VOLTS	VDC	AMPS	DCA		
1613																					
1615																					
1626																					
1635																					
1645																					
1646																					
1647																					
1649																					
1651																					
1653																					
1657																					
1658																					
1700																					
1702																					

8-45

NOTES: Voltage is 120V LINE TO LINE - L1-L2, L2-L3, L3-L1

TEST DATA



REF. NO. MLSTD 705
 SHEET 1 OF 1
 DATE 6 FEB 1988
 JOB NO. 5552140
 PROJ. ENGR. _____
 RECORDER/OBSERVER _____

National Technical Systems
 Scientific Services Group
 Testing Division
 P.O. Box 38
 Harwood, Virginia 22471
 Tel: 703 752 5300

Regulator Range Computation Sheet

ITEM 30 KW 60 Hz
GENERATOR SET
MODIFIED
 DEGR. JOHN R. HOLINGSWORTH
 MODEL NO. MEP 005A
 SERIAL NO. KZ05841

TIME →	LOAD	VOLTAGE				VOLTS AVERAGE	REG. PERCENT
		L1 - L2	L2 - L3	L3 - L1			
1645	R/L	209	209	208		208.6	
	N/L	210	210	210		210	.67
	N/L	240	240	240		240	
	R/L	239	239	239		239	.42
MAX V →	N/L	260	260.1	260		260.03	
	R/L	259	259	259		259	.40
	R/L	197	197	197		197	
		199	199	198		198.6	.80

Where percent of regulation is defined as:

$$V_{NL} \text{ avg.} - \frac{V_{RL} \text{ avg.}}{V_{RL} \text{ avg.}} \times 100$$

NOTES:

REGULATOR RANCA TEST 5111

BEGIN SCAN GROUP 1 21 JAN 88 16:15:41
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	733.31	DEG.	F
C	2	EXHAUST 2	745.31	DEG.	F
C	3	EXHAUST 3	752.36	DEG.	F
C	4	EXHAUST 4	792.74	DEG.	F
C	5	EXHAUST 5	839.98	DEG.	F
C	6	EXHAUST 6	761.67	DEG.	F
C	7	ENG. COOL. IN	198.13	DEG.	F
C	8	ENG. COOL. OUT	287.29	DEG.	F
C	9	OIL SUMP	222.97	DEG.	F
C	10	OIL GALLERY	224.76	DEG.	F
C	13	ENG. INTAKE	136.83	DEG.	F
C	14	RAD. TOP LEFT	158.38	DEG.	F
C	15	RAD. BTM LEFT	146.43	DEG.	F
C	16	RAD. TOP RIGHT	145.14	DEG.	F
C	17	RAD. BTM RIGHT	138.66	DEG.	F
C	18	GEN. AIR IN	119.71	DEG.	F
C	19	GEN. AIR OUT	141.86	DEG.	F
C	20	GEN. FRAME TOP	136.38	DEG.	F
C	21	GEN. FRAME BTM	138.87	DEG.	F
C	22	GEN. EXCITER	136.52	DEG.	F
C	23	GEN. VOLT. REG.	137.89	DEG.	F
C	24	CONTROL PANEL	137.46	DEG.	F
C	25	RELAY AREA	128.68	DEG.	F
C	26	BATTERY LEFT	148.18	DEG.	F
C	27	BATTERY RIGHT	148.81	DEG.	F
C	28	AIR IN SET	122.12	DEG.	F
C	29	FUEL TANK	138.63	DEG.	F
C	30	FUEL OUTLET	149.84	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:15:50

STOPPED SINGLE SCAN 22 JAN 88 16:15:50

BEGIN SCAN GROUP 1 22 JAN 88 16:23:59
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	804.77	DEG.	F
C	2	EXHAUST 2	756.97	DEG.	F
C	3	EXHAUST 3	778.65	DEG.	F
C	4	EXHAUST 4	808.53	DEG.	F
C	5	EXHAUST 5	855.69	DEG.	F
C	6	EXHAUST 6	784.93	DEG.	F
C	7	ENG. COOL. IN	283.85	DEG.	F
C	8	ENG. COOL. OUT	213.48	DEG.	F
C	9	OIL SUMP	238.63	DEG.	F
C	10	OIL GALLERY	232.56	DEG.	F
C	13	ENG. INTAKE	137.46	DEG.	F
C	14	RAD. TOP LEFT	163.29	DEG.	F
C	15	RAD. BTM LEFT	149.58	DEG.	F
C	16	RAD. TOP RIGHT	147.56	DEG.	F
C	17	RAD. BTM RIGHT	139.41	DEG.	F
C	18	GEN. AIR IN	119.79	DEG.	F
C	19	GEN. AIR OUT	142.49	DEG.	F
C	20	GEN. FRAME TOP	135.63	DEG.	F
C	21	GEN. FRAME BTM	129.87	DEG.	F
C	22	GEN. EXCITER	138.58	DEG.	F
C	23	GEN. VOLT. REG.	136.77	DEG.	F
C	24	CONTROL PANEL	138.88	DEG.	F
C	25	RELAY AREA	122.57	DEG.	F
C	26	BATTERY LEFT	158.98	DEG.	F
C	27	BATTERY RIGHT	149.68	DEG.	F
C	28	AIR IN SET	123.68	DEG.	F
C	29	FUEL TANK	138.43	DEG.	F
C	30	FUEL OUTLET	148.38	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:26:08

STOPPED SINGLE SCAN 22 JAN 88 16:26:08

BEGIN SCAN GROUP 1 22 JAN 88 16:35:05
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	807.22	DEG.	F
C	2	EXHAUST 2	768.65	DEG.	F
C	3	EXHAUST 3	772.76	DEG.	F
C	4	EXHAUST 4	818.14	DEG.	F
C	5	EXHAUST 5	854.82	DEG.	F
C	6	EXHAUST 6	785.85	DEG.	F
C	7	ENG. COOL. IN	284.83	DEG.	F
C	8	ENG. COOL. OUT	214.56	DEG.	F
C	9	OIL SUMP	233.89	DEG.	F
C	10	OIL GALLERY	235.76	DEG.	F
C	13	ENG. INTAKE	138.19	DEG.	F
C	14	RAD. TOP LEFT	164.26	DEG.	F
C	15	RAD. BTM LEFT	158.38	DEG.	F
C	16	RAD. TOP RIGHT	148.48	DEG.	F
C	17	RAD. BTM RIGHT	148.77	DEG.	F
C	18	GEN. AIR IN	128.56	DEG.	F
C	19	GEN. AIR OUT	142.81	DEG.	F
C	20	GEN. FRAME TOP	136.12	DEG.	F
C	21	GEN. FRAME BTM	128.78	DEG.	F
C	22	GEN. EXCITER	139.16	DEG.	F
C	23	GEN. VOLT. REG.	136.99	DEG.	F
C	24	CONTROL PANEL	139.41	DEG.	F
C	25	RELAY AREA	123.82	DEG.	F
C	26	BATTERY LEFT	152.85	DEG.	F
C	27	BATTERY RIGHT	158.87	DEG.	F
C	28	AIR IN SET	124.92	DEG.	F
C	29	FUEL TANK	138.33	DEG.	F
C	30	FUEL OUTLET	148.52	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:35:14

STOPPED SINGLE SCAN 22 JAN 88 16:35:14

BEGIN SCAN GROUP 1 22 JAN 88 16:44:51
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	818.52	DEG.	F
C	2	EXHAUST 2	757.92	DEG.	F
C	3	EXHAUST 3	769.68	DEG.	F
C	4	EXHAUST 4	811.96	DEG.	F
C	5	EXHAUST 5	856.98	DEG.	F
C	6	EXHAUST 6	788.49	DEG.	F
C	7	ENG. COOL. IN	285.29	DEG.	F
C	8	ENG. COOL. OUT	214.91	DEG.	F
C	9	OIL SUMP	235.44	DEG.	F
C	10	OIL GALLERY	237.35	DEG.	F
C	13	ENG. INTAKE	138.52	DEG.	F
C	14	RAD. TOP LEFT	164.98	DEG.	F
C	15	RAD. BTM LEFT	158.59	DEG.	F
C	16	RAD. TOP RIGHT	148.98	DEG.	F
C	17	RAD. BTM RIGHT	141.36	DEG.	F
C	18	GEN. AIR IN	121.76	DEG.	F
C	19	GEN. AIR OUT	143.48	DEG.	F
C	20	GEN. FRAME TOP	136.47	DEG.	F
C	21	GEN. FRAME BTM	129.82	DEG.	F
C	22	GEN. EXCITER	139.58	DEG.	F
C	23	GEN. VOLT. REG.	137.31	DEG.	F
C	24	CONTROL PANEL	138.83	DEG.	F
C	25	RELAY AREA	123.19	DEG.	F
C	26	BATTERY LEFT	152.91	DEG.	F
C	27	BATTERY RIGHT	158.68	DEG.	F
C	28	AIR IN SET	125.88	DEG.	F
C	29	FUEL TANK	138.22	DEG.	F
C	30	FUEL OUTLET	148.15	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:45:01

STOPPED SINGLE SCAN 22 JAN 88 16:45:01

BEGIN SCAN GROUP 1 22 JAN 88 16:46:16
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	540.63	DEG.	F
C	2	EXHAUST 2	512.32	DEG.	F
C	3	EXHAUST 3	525.61	DEG.	F
C	4	EXHAUST 4	590.00	DEG.	F
C	5	EXHAUST 5	618.03	DEG.	F
C	6	EXHAUST 6	563.82	DEG.	F
C	7	ENG. COOL. IN	204.80	DEG.	F
C	8	ENG. COOL. OUT	214.02	DEG.	F
C	9	OIL SUMP	235.73	DEG.	F
C	10	OIL GALLERY	237.49	DEG.	F
C	13	ENG. INTAKE	138.70	DEG.	F
C	14	RAD. TOP LEFT	164.70	DEG.	F
C	15	RAD. BTM LEFT	150.45	DEG.	F
C	16	RAD. TOP RIGHT	148.50	DEG.	F
C	17	RAD. BTM RIGHT	141.06	DEG.	F
C	18	GEN. AIR IN	121.05	DEG.	F
C	19	GEN. AIR OUT	143.12	DEG.	F
C	20	GEN. FRAME TOP	136.57	DEG.	F
C	21	GEN. FRAME BTM	129.01	DEG.	F
C	22	GEN. EXCITER	139.66	DEG.	F
C	23	GEN. VOLT. REG.	137.32	DEG.	F
C	24	CONTROL PANEL	138.77	DEG.	F
C	25	RELAY AREA	123.23	DEG.	F
C	26	BATTERY LEFT	152.80	DEG.	F
C	27	BATTERY RIGHT	151.00	DEG.	F
C	28	AIR IN SET	125.26	DEG.	F
C	29	FUEL TANK	130.30	DEG.	F
C	30	FUEL OUTLET	149.09	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:46:25

STOPPED SINGLE SCAN 22 JAN 88 16:46:25

BEGIN SCAN GROUP 1 22 JAN 88 16:47:30
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	370.21	DEG.	F
C	2	EXHAUST 2	367.04	DEG.	F
C	3	EXHAUST 3	390.53	DEG.	F
C	4	EXHAUST 4	461.66	DEG.	F
C	5	EXHAUST 5	469.99	DEG.	F
C	6	EXHAUST 6	434.03	DEG.	F
C	7	ENG. COOL. IN	196.57	DEG.	F
C	8	ENG. COOL. OUT	204.07	DEG.	F
C	9	OIL SUMP	235.06	DEG.	F
C	10	OIL GALLERY	236.46	DEG.	F
C	13	ENG. INTAKE	137.79	DEG.	F
C	14	RAD. TOP LEFT	160.52	DEG.	F
C	15	RAD. BTM LEFT	148.22	DEG.	F
C	16	RAD. TOP RIGHT	146.74	DEG.	F
C	17	RAD. BTM RIGHT	140.83	DEG.	F
C	18	GEN. AIR IN	121.28	DEG.	F
C	19	GEN. AIR OUT	142.19	DEG.	F
C	20	GEN. FRAME TOP	136.28	DEG.	F
C	21	GEN. FRAME BTM	129.13	DEG.	F
C	22	GEN. EXCITER	139.34	DEG.	F
C	23	GEN. VOLT. REG.	137.36	DEG.	F
C	24	CONTROL PANEL	138.91	DEG.	F
C	25	RELAY AREA	123.25	DEG.	F
C	26	BATTERY LEFT	152.39	DEG.	F
C	27	BATTERY RIGHT	150.63	DEG.	F
C	28	AIR IN SET	124.91	DEG.	F
C	29	FUEL TANK	130.27	DEG.	F
C	30	FUEL OUTLET	150.09	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:47:47

STOPPED SINGLE SCAN 22 JAN 88 16:47:47

BEGIN SCAN GROUP 1 22 JAN 88 16:49:42
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	770.53	DEG.	F
C	2	EXHAUST 2	712.11	DEG.	F
C	3	EXHAUST 3	718.50	DEG.	F
C	4	EXHAUST 4	761.55	DEG.	F
C	5	EXHAUST 5	816.91	DEG.	F
C	6	EXHAUST 6	736.02	DEG.	F
C	7	ENG. COOL. IN	194.16	DEG.	F
C	8	ENG. COOL. OUT	202.49	DEG.	F
C	9	OIL SUMP	232.45	DEG.	F
C	10	OIL GALLERY	234.49	DEG.	F
C	13	ENG. INTAKE	136.22	DEG.	F
C	14	RAD. TOP LEFT	150.45	DEG.	F
C	15	RAD. BTM LEFT	146.29	DEG.	F
C	16	RAD. TOP RIGHT	145.10	DEG.	F
C	17	RAD. BTM RIGHT	140.85	DEG.	F
C	18	GEN. AIR IN	118.66	DEG.	F
C	19	GEN. AIR OUT	140.76	DEG.	F
C	20	GEN. FRAME TOP	135.20	DEG.	F
C	21	GEN. FRAME BTM	128.71	DEG.	F
C	22	GEN. EXCITER	138.59	DEG.	F
C	23	GEN. VOLT. REG.	137.31	DEG.	F
C	24	CONTROL PANEL	138.95	DEG.	F
C	25	RELAY AREA	123.25	DEG.	F
C	26	BATTERY LEFT	152.10	DEG.	F
C	27	BATTERY RIGHT	150.51	DEG.	F
C	28	AIR IN SET	122.90	DEG.	F
C	29	FUEL TANK	130.14	DEG.	F
C	30	FUEL OUTLET	149.25	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:49:52

STOPPED SINGLE SCAN 22 JAN 88 16:49:52

BEGIN SCAN GROUP 1 22 JAN 88 16:51:14
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	382.89	DEG.	F
C	2	EXHAUST 2	370.96	DEG.	F
C	3	EXHAUST 3	391.82	DEG.	F
C	4	EXHAUST 4	464.41	DEG.	F
C	5	EXHAUST 5	473.76	DEG.	F
C	6	EXHAUST 6	433.72	DEG.	F
C	7	ENG. COOL. IN	192.98	DEG.	F
C	8	ENG. COOL. OUT	200.23	DEG.	F
C	9	OIL SUMP	232.16	DEG.	F
C	10	OIL GALLERY	233.60	DEG.	F
C	13	ENG. INTAKE	135.77	DEG.	F
C	14	RAD. TOP LEFT	157.13	DEG.	F
C	15	RAD. BTM LEFT	145.41	DEG.	F
C	16	RAD. TOP RIGHT	144.48	DEG.	F
C	17	RAD. BTM RIGHT	140.11	DEG.	F
C	18	GEN. AIR IN	120.18	DEG.	F
C	19	GEN. AIR OUT	140.54	DEG.	F
C	20	GEN. FRAME TOP	135.19	DEG.	F
C	21	GEN. FRAME BTM	128.59	DEG.	F
C	22	GEN. EXCITER	138.18	DEG.	F
C	23	GEN. VOLT. REG.	137.27	DEG.	F
C	24	CONTROL PANEL	139.12	DEG.	F
C	25	RELAY AREA	123.17	DEG.	F
C	26	BATTERY LEFT	151.59	DEG.	F
C	27	BATTERY RIGHT	150.70	DEG.	F
C	28	AIR IN SET	123.23	DEG.	F
C	29	FUEL TANK	130.20	DEG.	F
C	30	FUEL OUTLET	149.25	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:51:23

STOPPED SINGLE SCAN 22 JAN 88 16:51:23

BEGIN SCAN GROUP 1 22 JAN 88 16:53:17
30 KW/50 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	776.43	DEG.	F
C	2	EXHAUST 2	719.32	DEG.	F
C	3	EXHAUST 3	719.33	DEG.	F
C	4	EXHAUST 4	765.44	DEG.	F
C	5	EXHAUST 5	821.22	DEG.	F
C	6	EXHAUST 6	736.98	DEG.	F
C	7	ENG. COOL. IN	191.52	DEG.	F
C	8	ENG. COOL. OUT	193.74	DEG.	F
C	9	OIL SUMP	229.81	DEG.	F
C	10	OIL GALLERY	231.78	DEG.	F
C	13	ENG. INTAKE	134.36	DEG.	F
C	14	RAD. TOP LEFT	156.18	DEG.	F
C	15	RAD. BTM LEFT	144.32	DEG.	F
C	16	RAD. TOP RIGHT	143.79	DEG.	F
C	17	RAD. BTM RIGHT	139.84	DEG.	F
C	18	GEN. AIR IN	128.17	DEG.	F
C	19	GEN. AIR OUT	148.24	DEG.	F
C	20	GEN. FRAME TOP	134.41	DEG.	F
C	21	GEN. FRAME BTM	128.38	DEG.	F
C	22	GEN. EXCITER	137.92	DEG.	F
C	23	GEN. VOLT. REG.	137.85	DEG.	F
C	24	CONTROL PANEL	138.97	DEG.	F
C	25	RELAY AREA	122.98	DEG.	F
C	26	BATTERY LEFT	151.15	DEG.	F
C	27	BATTERY RIGHT	151.23	DEG.	F
C	28	AIR IN SET	122.98	DEG.	F
C	29	FUEL TANK	138.83	DEG.	F
C	30	FUEL OUTLET	149.27	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:53:26

STOPPED SINGLE SCAN 22 JAN 88 16:53:26

BEGIN SCAN GROUP 1 22 JAN 88 16:57:32
30 KW/50 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	793.93	DEG.	F
C	2	EXHAUST 2	738.86	DEG.	F
C	3	EXHAUST 3	718.82	DEG.	F
C	4	EXHAUST 4	792.94	DEG.	F
C	5	EXHAUST 5	842.71	DEG.	F
C	6	EXHAUST 6	763.46	DEG.	F
C	7	ENG. COOL. IN	197.97	DEG.	F
C	8	ENG. COOL. OUT	206.85	DEG.	F
C	9	OIL SUMP	229.17	DEG.	F
C	10	OIL GALLERY	231.29	DEG.	F
C	13	ENG. INTAKE	136.82	DEG.	F
C	14	RAD. TOP LEFT	168.23	DEG.	F
C	15	RAD. BTM LEFT	147.18	DEG.	F
C	16	RAD. TOP RIGHT	146.89	DEG.	F
C	17	RAD. BTM RIGHT	148.26	DEG.	F
C	18	GEN. AIR IN	121.56	DEG.	F
C	19	GEN. AIR OUT	141.43	DEG.	F
C	20	GEN. FRAME TOP	134.98	DEG.	F
C	21	GEN. FRAME BTM	128.83	DEG.	F
C	22	GEN. EXCITER	138.98	DEG.	F
C	23	GEN. VOLT. REG.	136.59	DEG.	F
C	24	CONTROL PANEL	138.54	DEG.	F
C	25	RELAY AREA	122.78	DEG.	F
C	26	BATTERY LEFT	158.72	DEG.	F
C	27	BATTERY RIGHT	158.53	DEG.	F
C	28	AIR IN SET	125.38	DEG.	F
C	29	FUEL TANK	138.88	DEG.	F
C	30	FUEL OUTLET	148.83	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:57:42

STOPPED SINGLE SCAN 22 JAN 88 16:57:42

BEGIN SCAN GROUP 1 22 JAN 88 16:58:25
30 KW/50 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	458.57	DEG.	F
C	2	EXHAUST 2	434.29	DEG.	F
C	3	EXHAUST 3	458.26	DEG.	F
C	4	EXHAUST 4	521.79	DEG.	F
C	5	EXHAUST 5	535.98	DEG.	F
C	6	EXHAUST 6	487.36	DEG.	F
C	7	ENG. COOL. IN	198.86	DEG.	F
C	8	ENG. COOL. OUT	205.95	DEG.	F
C	9	OIL SUMP	229.83	DEG.	F
C	10	OIL GALLERY	231.44	DEG.	F
C	13	ENG. INTAKE	136.57	DEG.	F
C	14	RAD. TOP LEFT	168.28	DEG.	F
C	15	RAD. BTM LEFT	147.28	DEG.	F
C	16	RAD. TOP RIGHT	146.63	DEG.	F
C	17	RAD. BTM RIGHT	148.33	DEG.	F
C	18	GEN. AIR IN	123.11	DEG.	F
C	19	GEN. AIR OUT	141.88	DEG.	F
C	20	GEN. FRAME TOP	135.15	DEG.	F
C	21	GEN. FRAME BTM	128.63	DEG.	F
C	22	GEN. EXCITER	139.15	DEG.	F
C	23	GEN. VOLT. REG.	136.58	DEG.	F
C	24	CONTROL PANEL	138.48	DEG.	F
C	25	RELAY AREA	122.81	DEG.	F
C	26	BATTERY LEFT	158.57	DEG.	F
C	27	BATTERY RIGHT	158.59	DEG.	F
C	28	AIR IN SET	126.19	DEG.	F
C	29	FUEL TANK	138.11	DEG.	F
C	30	FUEL OUTLET	148.11	DEG.	F

END SCAN GROUP 1 22 JAN 88 16:58:34

STOPPED SINGLE SCAN 22 JAN 88 16:58:35

BEGIN SCAN GROUP 1 22 JAN 88 17:00:00
30 KW/50 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	344.92	DEG.	F
C	2	EXHAUST 2	348.91	DEG.	F
C	3	EXHAUST 3	362.38	DEG.	F
C	4	EXHAUST 4	442.37	DEG.	F
C	5	EXHAUST 5	447.62	DEG.	F
C	6	EXHAUST 6	483.97	DEG.	F
C	7	ENG. COOL. IN	198.33	DEG.	F
C	8	ENG. COOL. OUT	197.86	DEG.	F
C	9	OIL SUMP	228.84	DEG.	F
C	10	OIL GALLERY	238.35	DEG.	F
C	13	ENG. INTAKE	136.37	DEG.	F
C	14	RAD. TOP LEFT	157.88	DEG.	F
C	15	RAD. BTM LEFT	146.12	DEG.	F
C	16	RAD. TOP RIGHT	145.48	DEG.	F
C	17	RAD. BTM RIGHT	148.73	DEG.	F
C	18	GEN. AIR IN	124.71	DEG.	F
C	19	GEN. AIR OUT	141.14	DEG.	F
C	20	GEN. FRAME TOP	135.13	DEG.	F
C	21	GEN. FRAME BTM	128.87	DEG.	F
C	22	GEN. EXCITER	139.25	DEG.	F
C	23	GEN. VOLT. REG.	136.48	DEG.	F
C	24	CONTROL PANEL	138.63	DEG.	F
C	25	RELAY AREA	123.16	DEG.	F
C	26	BATTERY LEFT	158.33	DEG.	F
C	27	BATTERY RIGHT	158.79	DEG.	F
C	28	AIR IN SET	126.76	DEG.	F
C	29	FUEL TANK	138.82	DEG.	F
C	30	FUEL OUTLET	149.83	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:00:18

STOPPED SINGLE SCAN 22 JAN 88 17:00:18

FREE AIR RANCE TEST S11.2

BEGIN SCAN GROUP 1 22 JAN 88 17:04:31
30 KW 60 HZ GEN SET S/N K20 5841

1	EXHAUST 1	785.44	DEG.	F
2	EXHAUST 2	738.76	DEG.	F
3	EXHAUST 3	741.73	DEG.	F
4	EXHAUST 4	783.38	DEG.	F
5	EXHAUST 5	832.73	DEG.	F
6	EXHAUST 6	751.13	DEG.	F
7	ENG. COOL. IN	195.61	DEG.	F
8	ENG. COOL. OUT	204.11	DEG.	F
9	OIL SUMP	226.39	DEG.	F
10	OIL GALLERY	228.38	DEG.	F
13	ENG. INTAKE	136.67	DEG.	F
14	RAD. TOP LEFT	159.89	DEG.	F
15	RAD. BTM LEFT	146.42	DEG.	F
16	RAD. TOP RIGHT	146.23	DEG.	F
17	RAD. BTM RIGHT	148.84	DEG.	F
18	GEN. AIR IN	122.64	DEG.	F
19	GEN. AIR OUT	141.48	DEG.	F
20	GEN. FRAME TOP	135.42	DEG.	F
21	GEN. FRAME BTM	129.95	DEG.	F
22	GEN. EXCITER	139.55	DEG.	F
23	GEN. VOLT. REG.	136.07	DEG.	F
24	CONTROL PANEL	137.91	DEG.	F
25	RELAY AREA	124.41	DEG.	F
26	BATTERY LEFT	158.68	DEG.	F
27	BATTERY RIGHT	151.55	DEG.	F
28	AIR IN SET	126.18	DEG.	F
29	FUEL TANK	129.98	DEG.	F
30	FUEL OUTLET	148.72	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:04:41

STOPPED SINGLE SCAN 22 JAN 88 17:04:41

BEGIN SCAN GROUP 1 22 JAN 88 17:14:58
30 KW 60 HZ GEN SET S/N K20 5841

1	EXHAUST 1	885.84	DEG.	F
2	EXHAUST 2	758.54	DEG.	F
3	EXHAUST 3	767.66	DEG.	F
4	EXHAUST 4	888.76	DEG.	F
5	EXHAUST 5	855.34	DEG.	F
6	EXHAUST 6	784.86	DEG.	F
7	ENG. COOL. IN	203.03	DEG.	F
8	ENG. COOL. OUT	212.49	DEG.	F
9	OIL SUMP	231.88	DEG.	F
10	OIL GALLERY	233.17	DEG.	F
13	ENG. INTAKE	136.44	DEG.	F
14	RAD. TOP LEFT	162.86	DEG.	F
15	RAD. BTM LEFT	148.92	DEG.	F
16	RAD. TOP RIGHT	147.49	DEG.	F
17	RAD. BTM RIGHT	148.38	DEG.	F
18	GEN. AIR IN	121.58	DEG.	F
19	GEN. AIR OUT	141.57	DEG.	F
20	GEN. FRAME TOP	134.49	DEG.	F
21	GEN. FRAME BTM	127.86	DEG.	F
22	GEN. EXCITER	138.82	DEG.	F
23	GEN. VOLT. REG.	135.68	DEG.	F
24	CONTROL PANEL	137.18	DEG.	F
25	RELAY AREA	122.47	DEG.	F
26	BATTERY LEFT	151.78	DEG.	F
27	BATTERY RIGHT	152.89	DEG.	F
28	AIR IN SET	125.48	DEG.	F
29	FUEL TANK	129.79	DEG.	F
30	FUEL OUTLET	147.85	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:15:07

STOPPED SINGLE SCAN 22 JAN 88 17:15:07

BEGIN SCAN GROUP 1 22 JAN 88 17:37:50
30 KW 60 HZ GEN SET S/N K20 5841

1	EXHAUST 1	887.24	DEG.	F
2	EXHAUST 2	759.57	DEG.	F
3	EXHAUST 3	768.25	DEG.	F
4	EXHAUST 4	815.81	DEG.	F
5	EXHAUST 5	857.58	DEG.	F
6	EXHAUST 6	795.32	DEG.	F
7	ENG. COOL. IN	206.87	DEG.	F
8	ENG. COOL. OUT	215.71	DEG.	F
9	OIL SUMP	236.78	DEG.	F
10	OIL GALLERY	238.42	DEG.	F
13	ENG. INTAKE	139.96	DEG.	F
14	RAD. TOP LEFT	166.31	DEG.	F
15	RAD. BTM LEFT	152.81	DEG.	F
16	RAD. TOP RIGHT	158.38	DEG.	F
17	RAD. BTM RIGHT	142.27	DEG.	F
18	GEN. AIR IN	122.98	DEG.	F
19	GEN. AIR OUT	144.52	DEG.	F
20	GEN. FRAME TOP	137.63	DEG.	F
21	GEN. FRAME BTM	138.88	DEG.	F
22	GEN. EXCITER	148.52	DEG.	F
23	GEN. VOLT. REG.	137.41	DEG.	F
24	CONTROL PANEL	139.36	DEG.	F
25	RELAY AREA	125.81	DEG.	F
26	BATTERY LEFT	154.29	DEG.	F
27	BATTERY RIGHT	152.35	DEG.	F
28	AIR IN SET	126.84	DEG.	F
29	FUEL TANK	129.86	DEG.	F
30	FUEL OUTLET	149.98	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:37:59

STOPPED SINGLE SCAN 22 JAN 88 17:37:59

BEGIN SCAN GROUP 1 22 JAN 88 17:39:48
30 KW 60 HZ GEN SET S/N K20 5841

1	EXHAUST 1	882.12	DEG.	F
2	EXHAUST 2	765.21	DEG.	F
3	EXHAUST 3	772.69	DEG.	F
4	EXHAUST 4	828.77	DEG.	F
5	EXHAUST 5	865.24	DEG.	F
6	EXHAUST 6	787.37	DEG.	F
7	ENG. COOL. IN	206.31	DEG.	F
8	ENG. COOL. OUT	216.14	DEG.	F
9	OIL SUMP	236.83	DEG.	F
10	OIL GALLERY	238.45	DEG.	F
13	ENG. INTAKE	139.78	DEG.	F
14	RAD. TOP LEFT	166.46	DEG.	F
15	RAD. BTM LEFT	151.45	DEG.	F
16	RAD. TOP RIGHT	149.52	DEG.	F
17	RAD. BTM RIGHT	142.11	DEG.	F
18	GEN. AIR IN	120.58	DEG.	F
19	GEN. AIR OUT	144.88	DEG.	F
20	GEN. FRAME TOP	137.33	DEG.	F
21	GEN. FRAME BTM	138.87	DEG.	F
22	GEN. EXCITER	148.13	DEG.	F
23	GEN. VOLT. REG.	137.65	DEG.	F
24	CONTROL PANEL	139.29	DEG.	F
25	RELAY AREA	125.83	DEG.	F
26	BATTERY LEFT	154.38	DEG.	F
27	BATTERY RIGHT	152.93	DEG.	F
28	AIR IN SET	124.32	DEG.	F
29	FUEL TANK	129.68	DEG.	F
30	FUEL OUTLET	158.86	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:39:49

STOPPED SINGLE SCAN 22 JAN 88 17:39:49

BEGIN SCAN GROUP 1 22 JAN 88 17:24:56
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	886.69	DEG.	F
C	2	EXHAUST 2	758.18	DEG.	F
C	3	EXHAUST 3	171.48	DEG.	F
C	4	EXHAUST 4	812.11	DEG.	F
C	5	EXHAUST 5	853.28	DEG.	F
C	6	EXHAUST 6	798.86	DEG.	F
C	7	ENG. COOL. IN	285.85	DEG.	F
C	8	ENG. COOL. OUT	214.56	DEG.	F
C	9	OIL SUMP	234.84	DEG.	F
C	10	OIL GALLERY	236.82	DEG.	F
C	13	ENG. INTAKE	138.53	DEG.	F
C	14	RAD. TOP LEFT	164.84	DEG.	F
C	15	RAD. BTM LEFT	158.69	DEG.	F
C	16	RAD. TOP RIGHT	148.91	DEG.	F
C	17	RAD. BTM RIGHT	148.53	DEG.	F
C	18	GEN. AIR IN	121.86	DEG.	F
C	19	GEN. AIR OUT	142.79	DEG.	F
C	20	GEN. FRAME TOP	136.82	DEG.	F
C	21	GEN. FRAME BTM	129.84	DEG.	F
C	22	GEN. EXCITER	139.33	DEG.	F
C	23	GEN. VOLT. REG.	136.29	DEG.	F
C	24	CONTROL PANEL	138.17	DEG.	F
C	25	RELAY AREA	123.78	DEG.	F
C	26	BATTERY LEFT	153.26	DEG.	F
C	27	BATTERY RIGHT	152.66	DEG.	F
C	28	AIR IN SET	125.84	DEG.	F
C	29	FUEL TANK	129.72	DEG.	F
C	30	FUEL OUTLET	148.41	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:25:05

STOPPED SINGLE SCAN 22 JAN 88 17:25:05

BEGIN SCAN GROUP 1 22 JAN 88 17:34:52
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	814.48	DEG.	F
C	2	EXHAUST 2	768.74	DEG.	F
C	3	EXHAUST 3	772.23	DEG.	F
C	4	EXHAUST 4	811.92	DEG.	F
C	5	EXHAUST 5	861.11	DEG.	F
C	6	EXHAUST 6	791.38	DEG.	F
C	7	ENG. COOL. IN	286.18	DEG.	F
C	8	ENG. COOL. OUT	215.84	DEG.	F
C	9	OIL SUMP	235.77	DEG.	F
C	10	OIL GALLERY	237.79	DEG.	F
C	13	ENG. INTAKE	139.77	DEG.	F
C	14	RAD. TOP LEFT	163.67	DEG.	F
C	15	RAD. BTM LEFT	151.84	DEG.	F
C	16	RAD. TOP RIGHT	158.15	DEG.	F
C	17	RAD. BTM RIGHT	141.81	DEG.	F
C	18	GEN. AIR IN	122.51	DEG.	F
C	19	GEN. AIR OUT	144.89	DEG.	F
C	20	GEN. FRAME TOP	137.28	DEG.	F
C	21	GEN. FRAME BTM	129.94	DEG.	F
C	22	GEN. EXCITER	148.68	DEG.	F
C	23	GEN. VOLT. REG.	137.28	DEG.	F
C	24	CONTROL PANEL	138.73	DEG.	F
C	25	RELAY AREA	124.68	DEG.	F
C	26	BATTERY LEFT	154.28	DEG.	F
C	27	BATTERY RIGHT	152.21	DEG.	F
C	28	AIR IN SET	126.68	DEG.	F
C	29	FUEL TANK	129.75	DEG.	F
C	30	FUEL OUTLET	149.74	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:35:02

STOPPED SINGLE SCAN 22 JAN 88 17:35:02

BEGIN SCAN GROUP 1 22 JAN 88 17:41:35
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	384.28	DEG.	F
C	2	EXHAUST 2	394.97	DEG.	F
C	3	EXHAUST 3	412.88	DEG.	F
C	4	EXHAUST 4	487.66	DEG.	F
C	5	EXHAUST 5	492.78	DEG.	F
C	6	EXHAUST 6	456.99	DEG.	F
C	7	ENG. COOL. IN	282.12	DEG.	F
C	8	ENG. COOL. OUT	218.29	DEG.	F
C	9	OIL SUMP	236.18	DEG.	F
C	10	OIL GALLERY	237.89	DEG.	F
C	13	ENG. INTAKE	139.18	DEG.	F
C	14	RAD. TOP LEFT	163.51	DEG.	F
C	15	RAD. BTM LEFT	158.15	DEG.	F
C	16	RAD. TOP RIGHT	148.68	DEG.	F
C	17	RAD. BTM RIGHT	141.78	DEG.	F
C	18	GEN. AIR IN	121.57	DEG.	F
C	19	GEN. AIR OUT	143.12	DEG.	F
C	20	GEN. FRAME TOP	137.86	DEG.	F
C	21	GEN. FRAME BTM	129.82	DEG.	F
C	22	GEN. EXCITER	148.53	DEG.	F
C	23	GEN. VOLT. REG.	137.59	DEG.	F
C	24	CONTROL PANEL	139.18	DEG.	F
C	25	RELAY AREA	124.73	DEG.	F
C	26	BATTERY LEFT	154.21	DEG.	F
C	27	BATTERY RIGHT	152.54	DEG.	F
C	28	AIR IN SET	125.88	DEG.	F
C	29	FUEL TANK	129.77	DEG.	F
C	30	FUEL OUTLET	158.79	DEG.	F

END SCAN GROUP 1 22 JAN 88 17:41:44

STOPPED SINGLE SCAN 22 JAN 88 17:41:44

TEST DATA

ITEM 30 Kw/60Hz

NTS

REF. NO. MIL-STD 705

DATE 22 JAN 1988

SHEET 1 OF

TESTER JAMES E. HARRINGTON

Testing Division

MODEL NO. 118P 005A

P.O. Box 38

SERIAL NO. 120 5381

Highwood, Virginia 22471

PROJECT NO. 118P 005A

1st 703 752 5300

PROJ. ENGR.

RECORDER/OBSERVER *William R. Resnick*

RECORDER/OBSERVER *Kim G. Galt*

TEST TIME	LOAD STEP NO.	6028 VOLTAGE			6028 AMPERES			6028 WATTS			POWER FACTOR	FREQ.	6028 EXCITER FIELD		AMB. TEMP.	PRESS. IN ROOM
		V1-VAC	V2-VAC	V3-VAC	V1-AC RMS	V2-AC RMS	V3-AC RMS	V1-W	V2-W	V3-W	PF	Hz	VDC	AMPS	F	IN
1805		5140	119	120	2.5	2.52	2.52	240	248	248	.82	60.5	10.7	3.6	125	135 361
1810	1/1	119	120	120	2.5	2.51	2.53	.25	.25	.25	.82	60.1	10.0	3.6	125	134 552
1815	1/1	119	120	120	2.5	2.51	2.53	.25	.25	.25	.82	60.1	11.2	3.6	124	134 552
1820	1/1	119	120	120	2.5	2.51	2.53	.25	.25	.25	.82	60.2	11.4	3.6	125	131 506
1825		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1830		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1835		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1840		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1843		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1846		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1850		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1853		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361
1854		5140	119	120	2.5	2.51	2.53	240	248	248	.82	60.5	10.7	3.6	125	135 361

4-73

NTS

2014-15

Ms. A. 9.2.11.1

111111. JOHN R. POLLEN'S WORTH

MODEL NO. NRP COSA

SERIAL NO. 1650271

REF. NO. MC 577 705

SHEET 1 **OF** 2

DATE. 22 JAN 1968

JOH 110. 555 2140

PROJ. F.NCR.

RECORDED/ONSERVER km/35/6c

Testing Division

DE ROY CO
COURT HOUSE

11/21/2001 Victoria 22471

Tel: 703 752 5300

Schritt 1c

Scrittori

Exhibit

WINDING RESISTANCE TEST

62970

TIME	DIA. IN. AIR	IN. TIP. IIR	LEAD RESISTANCE	WINDING RESIS. IIR	WINDING	WINDING, RESIS. CLR TO 447252	AVG. WINDING TIME
1838	102.2	10-3	0	.1022	1	.0927	12.5
	99.6	10-3		.0996	2	.0994	
	103.0	10-3		.1030	3	.0934	
	103.1	10-3		.1031	7	.0935	
	99.0	10-3		.0990	8	.0898	
	95.5	10-3		.0955	9	.0866	
	2.6	1		2.6	F1	2.354	
	102.6	10-3		.1006	1	.0913	12.5
	99.0	10-3		.0990	2	.0898	
	102.6	10-3		.1016	3	.0931	
	103.1	10-3		.1031	7	.0935	
	98.2	10-3		.0982	8	.0891	
	95.5	10-3		.0955	9	.0866	
	2.6	1		2.6	F1	2.354	
	100.1	10-3		.1001	1	.0908	12.5
	98.7	10-3		.0987	2	.0895	
	102.1	10-3		.1021	3	.0926	
	101.7	10-3		.1017	7	.0923	
	97.5	10-3		.0975	8	.0884	
	94.9	10-3		.0949	9	.0861	
	2.6	1		2.6	F1	2.354	
	99.6	10-3		.0996	1	.0904	12.5
	98.2	10-3		.0982	2	.0891	
	101.6	10-3		.1016	3	.0922	
	101.3	10-3		.1013	7	.0919	
	97.2	10-3		.0972	8	.0882	
	94.4	10-3		.0944	9	.0856	

TEST DATA



ITEM 30kw/60Hz
 CAPACITOR SET
 MANUFACT
 MFG. JAMES HOLLINGSWORTH
 MODEL NO. MCR 054
 SERIAL NO. 120 5841

REF. NO. MU 511 705
 SHEET 2 OF 2
 DATE 22 JAN 1955
 JOB NO. 533 2140
 PROJ. ENGR.
 RECORDER/OBSERVER EM/BJK

National Technical Systems
 Scientific Services Group
 Testing Division
 PO Box 30
 Hahwood, Virginia 22471
 Tel: 703 752 5300

WINDING RESISTANCE TEST

62470

TEST LEAD TO UNIT	TIME HRS	DIA. INCHES	IN. TYP. JER	LEAD RESISTANCE	WINDING RESIS. OHMS	WINDING	WINDING CLAMP TO CLAMP RESIS.	AVG. WINDING TEMP.	WINDING TEMP.
	2.6	10.3	1		2.6	F1	2.357	125	57.6
	99.2	10.3	10.3		0.912	1	0.900		
	98.2	10.3	10.3		0.912	2	0.891		
	101.3	10.3	10.3		1.013	3	0.919		
	101.1	10.3	10.3		1.011	7	0.917		
	96.9	10.3	10.3		0.969	8	0.879		
	94.3	10.3	10.3		0.943	9	0.855		
	2.6	10.3	1		2.6	F1	2.357	125	
	99.7	10.3	10.3		0.991	1	0.899		
	97.8	10.3	10.3		0.978	2	0.887		
	101.1	10.3	10.3		1.011	3	0.917		
	100.7	10.3	10.3		1.007	7	0.913		
	96.6	10.3	10.3		0.966	8	0.876		
	93.8	10.3	10.3		0.938	9	0.851		
	2.6	10.3	1		2.6	F1	2.357		
1841									

100 90 80 70 60 50 40 30 20 10 0

30KW 60V 60A SET
S/N R20 584
WINDING T2-T5

TR = 56.06 °C

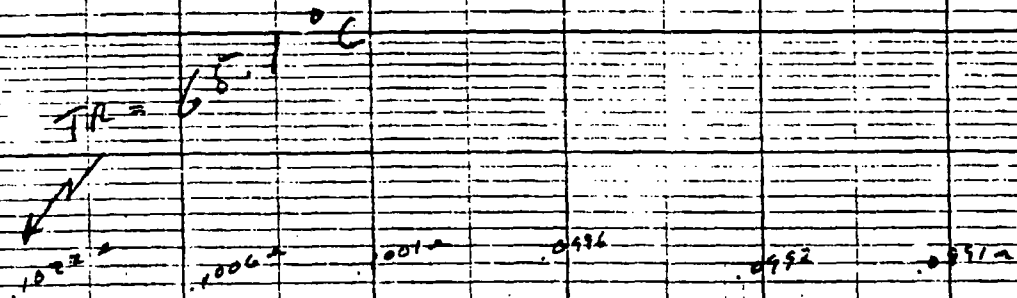
0.996 0.990 0.982 0.976 0.972 0.979

RESISTANCE

0 30 60 90 120 150
SECONDS E-77

30KW 2742 GSU SET
 3/10 K20 6345
 WINDING T1-T4

RESISTANCE



0 50 100 150
 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

30KW 60HZ GEN SET

S/N K205841

WINDING T3-T6

$T_R = 57.2^{\circ}\text{C}$



1030 Ω

1026 Ω

1021 Ω

1016 Ω

1012 Ω

1011 Ω

RESISTANCE

0

30

60

90

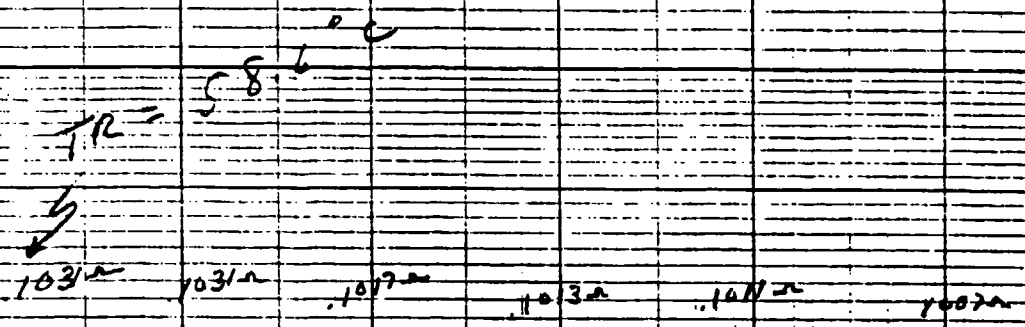
120
B-39

150

RECORD

30KW, 60Hz GEN SET
 S/N K20 5841
 WINDING T7-T10

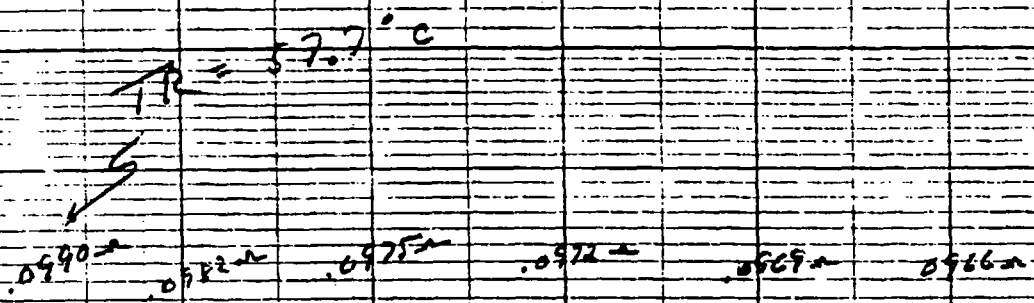
RESISTANCE



0 30 60 90 120 150
 SECONDS B-80 150

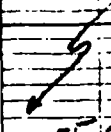
30KW 60Hz GEN SET
S/N K20 5841
WINDING TS-TII

RESISTANCE



30KV 60 HZ GEN SET
 S/N K205841
 WINDING T9-T12

TR = 53.4°C



0.555m 0.552m 0.549m 0.544m 0.533m 0.535m

RESISTANCE

0 30 60 90 120 150

R-82120

RECEIVED & ENTERED CO
 972
 DIVISION

30 KW, 60 Hz GEN SET

5/1 K20 5841

WINDING F1-F2

$R = 33.62 \Omega$

2.6 Ω 2.6 Ω 2.6 Ω 2.6 Ω 2.6 Ω 2.6 Ω

RESISTANCE

HIGH TEMP WINDOW RESISTANCE

BEGIN SCAN GROUP 1 22 JAN 88 18:04:50
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	785.38	DEG.	F
C	2	EXHAUST 2	717.88	DEG.	F
C	3	EXHAUST 3	722.89	DEG.	F
C	4	EXHAUST 4	757.94	DEG.	F
C	5	EXHAUST 5	804.18	DEG.	F
C	6	EXHAUST 6	714.48	DEG.	F
C	7	ENG. COOL. IN	187.62	DEG.	F
C	8	ENG. COOL. OUT	195.52	DEG.	F
C	9	OIL SUMP	212.26	DEG.	F
C	10	OIL GALLERY	213.58	DEG.	F
C	13	ENG. INTAKE	141.93	DEG.	F
C	14	RAD. TOP LEFT	154.47	DEG.	F
C	15	RAD. BTM LEFT	142.93	DEG.	F
C	16	RAD. TOP RIGHT	143.88	DEG.	F
C	17	RAD. BTM RIGHT	135.16	DEG.	F
C	18	GEN. AIR IN	121.72	DEG.	F
C	19	GEN. AIR OUT	148.55	DEG.	F
C	20	GEN. FRAME TOP	139.28	DEG.	F
C	21	GEN. FRAME BTM	129.18	DEG.	F
C	22	GEN. EXCITER	131.97	DEG.	F
C	23	GEN. VOLT. REG.	129.84	DEG.	F
C	24	CONTROL PANEL	128.11	DEG.	F
C	25	RELAY AREA		OPEN TC	
C	26	BATTERY LEFT	144.53	DEG.	F
C	27	BATTERY RIGHT	146.23	DEG.	F
C	28	AIR IN SET	124.92	DEG.	F
C	29	FUEL TANK	128.38	DEG.	F
C	30	FUEL OUTLET	148.48	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:05:00

STOPPED SINGLE SCAN 22 JAN 88 18:05:00

BEGIN SCAN GROUP 1 22 JAN 88 18:15:11
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	887.58	DEG.	F
C	2	EXHAUST 2	758.62	DEG.	F
C	3	EXHAUST 3	763.61	DEG.	F
C	4	EXHAUST 4	889.12	DEG.	F
C	5	EXHAUST 5	855.81	DEG.	F
C	6	EXHAUST 6	787.57	DEG.	F
C	7	ENG. COOL. IN	282.18	DEG.	F
C	8	ENG. COOL. OUT	211.47	DEG.	F
C	9	OIL SUMP	225.64	DEG.	F
C	10	OIL GALLERY	227.42	DEG.	F
C	13	ENG. INTAKE	136.42	DEG.	F
C	14	RAD. TOP LEFT	162.83	DEG.	F
C	15	RAD. BTM LEFT	148.85	DEG.	F
C	16	RAD. TOP RIGHT	146.14	DEG.	F
C	17	RAD. BTM RIGHT	137.43	DEG.	F
C	18	GEN. AIR IN	128.13	DEG.	F
C	19	GEN. AIR OUT	141.28	DEG.	F
C	20	GEN. FRAME TOP	134.59	DEG.	F
C	21	GEN. FRAME BTM	127.47	DEG.	F
C	22	GEN. EXCITER	142.83	DEG.	F
C	23	GEN. VOLT. REG.	131.73	DEG.	F
C	24	CONTROL PANEL	132.53	DEG.	F
C	25	RELAY AREA	133.88	DEG.	F
C	26	BATTERY LEFT	149.83	DEG.	F
C	27	BATTERY RIGHT	158.21	DEG.	F
C	28	AIR IN SET	122.47	DEG.	F
C	29	FUEL TANK	127.91	DEG.	F
C	30	FUEL OUTLET	146.27	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:15:20

STOPPED SINGLE SCAN 22 JAN 88 18:15:20

BEGIN SCAN GROUP 1 22 JAN 88 18:25:00
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	813.46	DEG.	F
C	2	EXHAUST 2	758.96	DEG.	F
C	3	EXHAUST 3	772.34	DEG.	F
C	4	EXHAUST 4	812.87	DEG.	F
C	5	EXHAUST 5	868.18	DEG.	F
C	6	EXHAUST 6	791.98	DEG.	F
C	7	ENG. COOL. IN	284.75	DEG.	F
C	8	ENG. COOL. OUT	214.44	DEG.	F
C	9	OIL SUMP	232.32	DEG.	F
C	10	OIL GALLERY	234.14	DEG.	F
C	13	ENG. INTAKE	138.88	DEG.	F
C	14	RAD. TOP LEFT	164.48	DEG.	F
C	15	RAD. BTM LEFT	158.32	DEG.	F
C	16	RAD. TOP RIGHT	148.31	DEG.	F
C	17	RAD. BTM RIGHT	139.55	DEG.	F
C	18	GEN. AIR IN	121.89	DEG.	F
C	19	GEN. AIR OUT	142.74	DEG.	F
C	20	GEN. FRAME TOP	135.94	DEG.	F
C	21	GEN. FRAME BTM	128.81	DEG.	F
C	22	GEN. EXCITER	144.78	DEG.	F
C	23	GEN. VOLT. REG.	134.27	DEG.	F
C	24	CONTROL PANEL	135.48	DEG.	F
C	25	RELAY AREA	135.84	DEG.	F
C	26	BATTERY LEFT	152.37	DEG.	F
C	27	BATTERY RIGHT	154.31	DEG.	F
C	28	AIR IN SET	124.49	DEG.	F
C	29	FUEL TANK	127.88	DEG.	F
C	30	FUEL OUTLET	147.77	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:25:09

STOPPED SINGLE SCAN 22 JAN 88 18:25:09

BEGIN SCAN GROUP 1 22 JAN 88 18:35:05
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	812.75	DEG.	F
C	2	EXHAUST 2	759.63	DEG.	F
C	3	EXHAUST 3	775.47	DEG.	F
C	4	EXHAUST 4	814.38	DEG.	F
C	5	EXHAUST 5	861.51	DEG.	F
C	6	EXHAUST 6	794.81	DEG.	F
C	7	ENG. COOL. IN	285.35	DEG.	F
C	8	ENG. COOL. OUT	214.97	DEG.	F
C	9	OIL SUMP	235.17	DEG.	F
C	10	OIL GALLERY	237.82	DEG.	F
C	13	ENG. INTAKE	138.83	DEG.	F
C	14	RAD. TOP LEFT	163.94	DEG.	F
C	15	RAD. BTM LEFT	158.89	DEG.	F
C	16	RAD. TOP RIGHT	149.18	DEG.	F
C	17	RAD. BTM RIGHT	148.41	DEG.	F
C	18	GEN. AIR IN	121.94	DEG.	F
C	19	GEN. AIR OUT	143.49	DEG.	F
C	20	GEN. FRAME TOP	136.23	DEG.	F
C	21	GEN. FRAME BTM	129.81	DEG.	F
C	22	GEN. EXCITER	145.42	DEG.	F
C	23	GEN. VOLT. REG.	135.46	DEG.	F
C	24	CONTROL PANEL	136.79	DEG.	F
C	25	RELAY AREA	135.17	DEG.	F
C	26	BATTERY LEFT	153.46	DEG.	F
C	27	BATTERY RIGHT	155.79	DEG.	F
C	28	AIR IN SET	125.78	DEG.	F
C	29	FUEL TANK	127.92	DEG.	F
C	30	FUEL OUTLET	148.18	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:35:15

STOPPED SINGLE SCAN 22 JAN 88 18:35:15

BEGIN SCAN GROUP 1 22 JAN 88 18:38:48
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	665.00	DEG.	F
C	2	EXHAUST 2	611.56	DEG.	F
C	3	EXHAUST 3	629.69	DEG.	F
C	4	EXHAUST 4	670.08	DEG.	F
C	5	EXHAUST 5	720.59	DEG.	F
C	6	EXHAUST 6	647.05	DEG.	F
C	7	ENG. COOL. IN	205.64	DEG.	F
C	8	ENG. COOL. OUT	215.62	DEG.	F
C	9	OIL SUMP	236.40	DEG.	F
C	10	OIL GALLERY	237.08	DEG.	F
C	13	ENG. INTAKE	138.66	DEG.	F
C	14	RAD. TOP LEFT	175.14	DEG.	F
C	15	RAD. BTM LEFT	154.26	DEG.	F
C	16	RAD. TOP RIGHT	156.04	DEG.	F
C	17	RAD. BTM RIGHT	141.45	DEG.	F
C	18	GEN. AIR IN	122.94	DEG.	F
C	19	GEN. AIR OUT	143.96	DEG.	F
C	20	GEN. FRAME TOP	136.63	DEG.	F
C	21	GEN. FRAME BTM	129.57	DEG.	F
C	22	GEN. EXCITER	144.79	DEG.	F
C	23	GEN. VOLT. REG.	135.78	DEG.	F
C	24	CONTROL PANEL	137.05	DEG.	F
C	25	RELAY AREA	136.77	DEG.	F
C	26	BATTERY LEFT	153.89	DEG.	F
C	27	BATTERY RIGHT	156.19	DEG.	F
C	28	AIR IN SET	124.62	DEG.	F
C	29	FUEL TANK	120.23	DEG.	F
C	30	FUEL OUTLET	140.57	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:38:55

BEGIN SCAN GROUP 1 22 JAN 88 18:39:16
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	563.41	DEG.	F
C	2	EXHAUST 2	520.03	DEG.	F
C	3	EXHAUST 3	558.56	DEG.	F
C	4	EXHAUST 4	600.38	DEG.	F
C	5	EXHAUST 5	652.54	DEG.	F
C	6	EXHAUST 6	570.03	DEG.	F
C	7	ENG. COOL. IN	201.90	DEG.	F
C	8	ENG. COOL. OUT	210.33	DEG.	F
C	9	OIL SUMP	236.68	DEG.	F
C	10	OIL GALLERY	232.71	DEG.	F
C	13	ENG. INTAKE	140.89	DEG.	F
C	14	RAD. TOP LEFT	194.55	DEG.	F
C	15	RAD. BTM LEFT	165.78	DEG.	F
C	16	RAD. TOP RIGHT	177.99	DEG.	F
C	17	RAD. BTM RIGHT	141.11	DEG.	F
C	18	GEN. AIR IN	123.68	DEG.	F
C	19	GEN. AIR OUT	141.57	DEG.	F
C	20	GEN. FRAME TOP	137.88	DEG.	F
C	21	GEN. FRAME BTM	130.06	DEG.	F
C	22	GEN. EXCITER	145.04	DEG.	F
C	23	GEN. VOLT. REG.	135.83	DEG.	F
C	24	CONTROL PANEL	136.90	DEG.	F
C	25	RELAY AREA	142.23	DEG.	F
C	26	BATTERY LEFT	154.11	DEG.	F
C	27	BATTERY RIGHT	156.98	DEG.	F
C	28	AIR IN SET	125.24	DEG.	F
C	29	FUEL TANK	120.26	DEG.	F
C	30	FUEL OUTLET	147.81	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:39:24

BEGIN SCAN GROUP 1 22 JAN 88 18:39:40
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	499.03	DEG.	F
C	2	EXHAUST 2	476.21	DEG.	F
C	3	EXHAUST 3	520.66	DEG.	F
C	4	EXHAUST 4	561.01	DEG.	F
C	5	EXHAUST 5	605.68	DEG.	F
C	6	EXHAUST 6	529.13	DEG.	F
C	7	ENG. COOL. IN	199.04	DEG.	F
C	8	ENG. COOL. OUT	226.54	DEG.	F
C	9	OIL SUMP	237.26	DEG.	F
C	10	OIL GALLERY	229.54	DEG.	F
C	13	ENG. INTAKE	141.50	DEG.	F
C	14	RAD. TOP LEFT	199.39	DEG.	F
C	15	RAD. BTM LEFT	171.54	DEG.	F
C	16	RAD. TOP RIGHT	184.55	DEG.	F
C	17	RAD. BTM RIGHT	140.76	DEG.	F
C	18	GEN. AIR IN	124.40	DEG.	F
C	19	GEN. AIR OUT	140.32	DEG.	F
C	20	GEN. FRAME TOP	139.34	DEG.	F
C	21	GEN. FRAME BTM	130.58	DEG.	F
C	22	GEN. EXCITER	146.74	DEG.	F
C	23	GEN. VOLT. REG.	135.96	DEG.	F
C	24	CONTROL PANEL	137.07	DEG.	F
C	25	RELAY AREA	145.76	DEG.	F
C	26	BATTERY LEFT	154.24	DEG.	F
C	27	BATTERY RIGHT	157.32	DEG.	F
C	28	AIR IN SET	124.86	DEG.	F
C	29	FUEL TANK	120.27	DEG.	F
C	30	FUEL OUTLET	147.58	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:39:54

BEGIN SCAN GROUP 1 22 JAN 88 18:40:10
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	455.53	DEG.	F
C	2	EXHAUST 2	451.12	DEG.	F
C	3	EXHAUST 3	495.41	DEG.	F
C	4	EXHAUST 4	533.32	DEG.	F
C	5	EXHAUST 5	571.47	DEG.	F
C	6	EXHAUST 6	499.99	DEG.	F
C	7	ENG. COOL. IN	197.72	DEG.	F
C	8	ENG. COOL. OUT	231.61	DEG.	F
C	9	OIL SUMP	237.04	DEG.	F
C	10	OIL GALLERY	226.45	DEG.	F
C	13	ENG. INTAKE	142.70	DEG.	F
C	14	RAD. TOP LEFT	202.00	DEG.	F
C	15	RAD. BTM LEFT	174.08	DEG.	F
C	16	RAD. TOP RIGHT	187.54	DEG.	F
C	17	RAD. BTM RIGHT	140.44	DEG.	F
C	18	GEN. AIR IN	125.01	DEG.	F
C	19	GEN. AIR OUT	139.51	DEG.	F
C	20	GEN. FRAME TOP	140.53	DEG.	F
C	21	GEN. FRAME BTM	131.05	DEG.	F
C	22	GEN. EXCITER	140.59	DEG.	F
C	23	GEN. VOLT. REG.	136.12	DEG.	F
C	24	CONTROL PANEL	137.30	DEG.	F
C	25	RELAY AREA	147.57	DEG.	F
C	26	BATTERY LEFT	154.32	DEG.	F
C	27	BATTERY RIGHT	157.63	DEG.	F
C	28	AIR IN SET	124.72	DEG.	F
C	29	FUEL TANK	120.28	DEG.	F
C	30	FUEL OUTLET	147.69	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:40:24

BEGIN SCAN GROUP 1 22 JAN 88 18:40:40
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	426.12	DEG.	F
C	2	EXHAUST 2	433.87	DEG.	F
C	3	EXHAUST 3	475.74	DEG.	F
C	4	EXHAUST 4	518.88	DEG.	F
C	5	EXHAUST 5	544.24	DEG.	F
C	6	EXHAUST 6	476.83	DEG.	F
C	7	ENG. COOL. IN	196.24	DEG.	F
C	8	ENG. COOL. OUT	234.89	DEG.	F
C	9	OIL SUMP	236.89	DEG.	F
C	10	OIL GALLERY	223.48	DEG.	F
C	13	ENG. INTAKE	143.76	DEG.	F
C	14	RAD. TOP LEFT	284.16	DEG.	F
C	15	RAD. BTM LEFT	174.71	DEG.	F
C	16	RAD. TOP RIGHT	191.28	DEG.	F
C	17	RAD. BTM RIGHT	148.25	DEG.	F
C	18	GEN. AIR IN	125.49	DEG.	F
C	19	GEN. AIR OUT	138.88	DEG.	F
C	20	GEN. FRAME TOP	141.48	DEG.	F
C	21	GEN. FRAME BTM	131.48	DEG.	F
C	22	GEN. EXCITER	158.18	DEG.	F
C	23	GEN. VOLT. REG.	136.28	DEG.	F
C	24	CONTROL PANEL	137.56	DEG.	F
C	25	RELAY AREA	149.88	DEG.	F
C	26	BATTERY LEFT	154.38	DEG.	F
C	27	BATTERY RIGHT	157.93	DEG.	F
C	28	AIR IN SET	124.71	DEG.	F
C	29	FUEL TANK	128.38	DEG.	F
C	30	FUEL OUTLET	147.96	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:40:54

BEGIN SCAN GROUP 1 22 JAN 88 18:41:18
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	484.67	DEG.	F
C	2	EXHAUST 2	428.43	DEG.	F
C	3	EXHAUST 3	458.28	DEG.	F
C	4	EXHAUST 4	491.25	DEG.	F
C	5	EXHAUST 5	521.34	DEG.	F
C	6	EXHAUST 6	457.24	DEG.	F
C	7	ENG. COOL. IN	195.53	DEG.	F
C	8	ENG. COOL. OUT	236.29	DEG.	F
C	9	OIL SUMP	236.65	DEG.	F
C	10	OIL GALLERY	221.25	DEG.	F
C	13	ENG. INTAKE	144.83	DEG.	F
C	14	RAD. TOP LEFT	287.29	DEG.	F
C	15	RAD. BTM LEFT	174.89	DEG.	F
C	16	RAD. TOP RIGHT	194.38	DEG.	F
C	17	RAD. BTM RIGHT	148.83	DEG.	F
C	18	GEN. AIR IN	126.85	DEG.	F
C	19	GEN. AIR OUT	138.83	DEG.	F
C	20	GEN. FRAME TOP	142.33	DEG.	F
C	21	GEN. FRAME BTM	131.88	DEG.	F
C	22	GEN. EXCITER	151.48	DEG.	F
C	23	GEN. VOLT. REG.	136.58	DEG.	F
C	24	CONTROL PANEL	137.83	DEG.	F
C	25	RELAY AREA	158.52	DEG.	F
C	26	BATTERY LEFT	154.37	DEG.	F
C	27	BATTERY RIGHT	158.15	DEG.	F
C	28	AIR IN SET	124.87	DEG.	F
C	29	FUEL TANK	128.28	DEG.	F
C	30	FUEL OUTLET	148.38	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:41:24

BEGIN SCAN GROUP 1 22 JAN 88 18:44:52
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	368.16	DEG.	F
C	2	EXHAUST 2	353.82	DEG.	F
C	3	EXHAUST 3	368.76	DEG.	F
C	4	EXHAUST 4	438.96	DEG.	F
C	5	EXHAUST 5	448.86	DEG.	F
C	6	EXHAUST 6	391.11	DEG.	F
C	7	ENG. COOL. IN	196.94	DEG.	F
C	8	ENG. COOL. OUT	284.87	DEG.	F
C	9	OIL SUMP	228.77	DEG.	F
C	10	OIL GALLERY	229.88	DEG.	F
C	13	ENG. INTAKE	145.21	DEG.	F
C	14	RAD. TOP LEFT	162.88	DEG.	F
C	15	RAD. BTM LEFT	158.77	DEG.	F
C	16	RAD. TOP RIGHT	148.75	DEG.	F
C	17	RAD. BTM RIGHT	141.79	DEG.	F
C	18	GEN. AIR IN	123.36	DEG.	F
C	19	GEN. AIR OUT	143.42	DEG.	F
C	20	GEN. FRAME TOP	139.87	DEG.	F
C	21	GEN. FRAME BTM	131.89	DEG.	F
C	22	GEN. EXCITER	144.12	DEG.	F
C	23	GEN. VOLT. REG.	138.84	DEG.	F
C	24	CONTROL PANEL	138.47	DEG.	F
C	25	RELAY AREA	137.51	DEG.	F
C	26	BATTERY LEFT	152.84	DEG.	F
C	27	BATTERY RIGHT	156.58	DEG.	F
C	28	AIR IN SET	125.58	DEG.	F
C	29	FUEL TANK	128.27	DEG.	F
C	30	FUEL OUTLET	158.85	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:45:07

STOPPED SINGLE SCAN 22 JAN 88 18:45:07

BEGIN SCAN GROUP 1 22 JAN 88 18:46:06
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	354.19	DEG.	F
C	2	EXHAUST 2	339.94	DEG.	F
C	3	EXHAUST 3	373.28	DEG.	F
C	4	EXHAUST 4	419.94	DEG.	F
C	5	EXHAUST 5	432.48	DEG.	F
C	6	EXHAUST 6	379.68	DEG.	F
C	7	ENG. COOL. IN	191.34	DEG.	F
C	8	ENG. COOL. OUT	198.88	DEG.	F
C	9	OIL SUMP	228.42	DEG.	F
C	10	OIL GALLERY	229.32	DEG.	F
C	13	ENG. INTAKE	141.24	DEG.	F
C	14	RAD. TOP LEFT	158.72	DEG.	F
C	15	RAD. BTM LEFT	148.58	DEG.	F
C	16	RAD. TOP RIGHT	147.13	DEG.	F
C	17	RAD. BTM RIGHT	141.58	DEG.	F
C	18	GEN. AIR IN	124.96	DEG.	F
C	19	GEN. AIR OUT	142.78	DEG.	F
C	20	GEN. FRAME TOP	139.85	DEG.	F
C	21	GEN. FRAME BTM	131.43	DEG.	F
C	22	GEN. EXCITER	142.72	DEG.	F
C	23	GEN. VOLT. REG.	138.25	DEG.	F
C	24	CONTROL PANEL	138.38	DEG.	F
C	25	RELAY AREA	136.54	DEG.	F
C	26	BATTERY LEFT	152.75	DEG.	F
C	27	BATTERY RIGHT	156.86	DEG.	F
C	28	AIR IN SET	126.88	DEG.	F
C	29	FUEL TANK	128.28	DEG.	F
C	30	FUEL OUTLET	152.58	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:46:15

STOPPED SINGLE SCAN 22 JAN 88 18:46:15

BEGIN SCAN GROUP 1 22 JAN 88 18:41:40
30 KW 60 HZ GEN SET S/N K20 5841

BEGIN SCAN GROUP 1 22 JAN 88 18:53:42
30 KW 60 HZ GEN SET S/N K20 5841

1	EXHAUST 1	388.17	DEG.	F
2	EXHAUST 2	483.12	DEG.	F
3	EXHAUST 3	443.48	DEG.	F
4	EXHAUST 4	473.88	DEG.	F
5	EXHAUST 5	581.38	DEG.	F
6	EXHAUST 6	448.13	DEG.	F
7	ENG. COOL. IN	194.83	DEG.	F
8	ENG. COOL. OUT	236.81	DEG.	F
9	OIL SUMP	236.35	DEG.	F
10	OIL GALLERY	218.53	DEG.	F
13	ENG. INTAKE	145.87	DEG.	F
14	RAD. TOP LEFT	211.81	DEG.	F
15	RAD. BTM LEFT	174.48	DEG.	F
16	RAD. TOP RIGHT	199.15	DEG.	F
17	RAD. BTM RIGHT	139.78	DEG.	F
18	GEN. AIR IN	125.78	DEG.	F
19	GEN. AIR OUT	138.72	DEG.	F
20	GEN. FRAME TOP	142.95	DEG.	F
21	GEN. FRAME BTM	132.25	DEG.	F
22	GEN. EXCITER	152.52	DEG.	F
23	GEN. VOLT. REG.	136.78	DEG.	F
24	CONTROL PANEL	138.18	DEG.	F
25	RELAY AREA	151.74	DEG.	F
26	BATTERY LEFT	154.38	DEG.	F
27	BATTERY RIGHT	158.37	DEG.	F
28	AIR IN SET	125.88	DEG.	F
29	FUEL TANK	128.29	DEG.	F
30	FUEL OUTLET	148.86	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:41:54

BEGIN SCAN GROUP 1 22 JAN 88 18:42:18
30 KW 60 HZ GEN SET S/N K20 5841

1	EXHAUST 1	374.97	DEG.	F
2	EXHAUST 2	399.82	DEG.	F
3	EXHAUST 3	438.19	DEG.	F
4	EXHAUST 4	457.92	DEG.	F
5	EXHAUST 5	483.39	DEG.	F
6	EXHAUST 6	424.82	DEG.	F
7	ENG. COOL. IN	194.61	DEG.	F
8	ENG. COOL. OUT	236.83	DEG.	F
9	OIL SUMP	236.81	DEG.	F
10	OIL GALLERY	217.57	DEG.	F
13	ENG. INTAKE	146.88	DEG.	F
14	RAD. TOP LEFT	214.85	DEG.	F
15	RAD. BTM LEFT	174.76	DEG.	F

STOPPED SCANNING 22 JAN 88 18:42:17

1	EXHAUST 1	333.62	DEG.	F
2	EXHAUST 2	313.55	DEG.	F
3	EXHAUST 3	331.55	DEG.	F
4	EXHAUST 4	399.11	DEG.	F
5	EXHAUST 5	414.67	DEG.	F
6	EXHAUST 6	351.21	DEG.	F
7	ENG. COOL. IN	176.71	DEG.	F
8	ENG. COOL. OUT	183.85	DEG.	F
9	OIL SUMP	221.33	DEG.	F
10	OIL GALLERY	222.64	DEG.	F
13	ENG. INTAKE	131.31	DEG.	F
14	RAD. TOP LEFT	148.67	DEG.	F
15	RAD. BTM LEFT	148.15	DEG.	F
16	RAD. TOP RIGHT	141.38	DEG.	F
17	RAD. BTM RIGHT	138.41	DEG.	F
18	GEN. AIR IN	124.12	DEG.	F
19	GEN. AIR OUT	138.19	DEG.	F
20	GEN. FRAME TOP	133.15	DEG.	F
21	GEN. FRAME BTM	128.51	DEG.	F
22	GEN. EXCITER	148.53	DEG.	F
23	GEN. VOLT. REG.	136.85	DEG.	F
24	CONTROL PANEL	137.74	DEG.	F
25	RELAY AREA	138.82	DEG.	F
26	BATTERY LEFT	149.18	DEG.	F
27	BATTERY RIGHT	153.76	DEG.	F
28	AIR IN SET	125.27	DEG.	F
29	FUEL TANK	128.17	DEG.	F
30	FUEL OUTLET	158.67	DEG.	F

END SCAN GROUP 1 22 JAN 88 18:53:51

STOPPED SINGLE SCAN 22 JAN 88 18:53:51

~~ANALOGUE TO DIGITAL CONVERTER~~
 BEGIN SCAN GROUP 1 23 JAN 88 06:20:55
 30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	87.165	DEG.	F
C	2	EXHAUST 2	87.139	DEG.	F
C	3	EXHAUST 3	87.322	DEG.	F
C	4	EXHAUST 4	87.241	DEG.	F
C	5	EXHAUST 5	87.343	DEG.	F
C	6	EXHAUST 6	87.397	DEG.	F
C	7	ENG. COOL. IN	81.958	DEG.	F
C	8	ENG. COOL. OUT	86.545	DEG.	F
C	9	OIL SUMP	85.839	DEG.	F
C	10	OIL GALLERY	86.131	DEG.	F
C	13	ENG. INTAKE	87.251	DEG.	F
C	14	RAD. TOP LEFT	83.961	DEG.	F
C	15	RAD. BTM LEFT	81.196	DEG.	F
C	16	RAD. TOP RIGHT	82.757	DEG.	F
C	17	RAD. BTM RIGHT	78.867	DEG.	F
C	18	GEN. AIR IN	75.185	DEG.	F
C	19	GEN. AIR OUT	88.895	DEG.	F
C	20	GEN. FRAME TOP	86.295	DEG.	F
C	21	GEN. FRAME BTM	88.878	DEG.	F
C	22	GEN. EXCITER	82.885	DEG.	F
C	23	GEN. VOLT. REG.	88.988	DEG.	F
C	24	CONTROL PANEL	88.389	DEG.	F
C	25	RELAY AREA	83.518	DEG.	F
C	26	BATTERY LEFT	85.425	DEG.	F
C	27	BATTERY RIGHT	83.922	DEG.	F
C	28	AIR IN SET	74.868	DEG.	F
C	29	FUEL TANK	81.855	DEG.	F
C	30	FUEL OUTLET	83.186	DEG.	F

END SCAN GROUP 1 23 JAN 88 06:21:05

STOPPED SINGLE SCAN 23 JAN 88 06:21:05

TEST DATA

NTS

REF. NO. MIL-STD 705; 608.2

SHEET 1 OF 2

DATE 23 Jan 1988

JOB NO. 555-2140

PROJ. ENCR.

RECORDER/OBSERVER B.J./km/cr

National Technical Systems
Scientific Services Group
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

ITEM 30 Kw / 60 Hz

GENERATOR SET

MODIFIED

MPGR. JEFF. R. HOLLOMAN

MODEL NO. MGP 005A

SERIAL NO. K20 5841

FREQUENCY AND VOLTAGE STABILITY TEST (LONG TERM)

INST TIME	STEP NO.	LOAD STEP	E-6028 D VOLTAGE			E-6040 D AMPERES %K			E-6230 D KILOWATTS %K			E-6240 D POWER FACTOR	E-6240 D FREQ. Hz	E-6270 D VOLTS VDC	E-6250 D AMPS DCA	AMB. TEMP. °F	TEST
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0						
0656			VAC	VAC	VAC	AC MPF	AC MPF	AC MPF	AC MPF	AC MPF	AC MPF						1/655
0710		RLC	119.5	120.5	120.5	2.52	2.55	2.55	2.51	2.51	2.51		57.5	9.1	3.5	126	1/658
0720		RLC	119.5	120.5	120.5	2.52	2.55	2.55	2.51	2.51	2.51		57.5	9.1	3.55	123	1/659
0731		RLC	119.5	120.5	120.5	2.52	2.55	2.55	2.51	2.51	2.51		57.5	9.1	3.55	126	1/660
0745		RLC	119.5	120.5	120.5	2.52	2.55	2.55	2.51	2.51	2.51		57.5	9.1	3.55	124	1/661
0755		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.0	3.65	125	1/662
0800		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.0	3.7	125	1/663
0810		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	126	1/664
0820		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/665
0830		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/666
0840		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/667
0850		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/668
0900		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/669
0910		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/670
0920		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/671
0930		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/672
0940		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/673
0950		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/674
1000		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/675
1010		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/676
1020		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/677
1030		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/678
1040		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/679
1050		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/680
1100		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/681
1110		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/682
1120		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/683
1130		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/684
1140		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/685
1150		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/686
1200		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/687
1210		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/688
1220		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/689
1230		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/690
1240		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/691
1250		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/692
1260		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/693
1270		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/694
1280		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/695
1290		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/696
1300		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/697
1310		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/698
1320		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/699
1330		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/700
1340		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/701
1350		RLC	120	121	120.5	2.53	2.55	2.55	2.52	2.52	2.52		57.5	10.2	3.75	125	1/702

NOTES:

ATA

ITEM 30 Kw / 60 Hz

SELECTION SET

27:01550

MPCR: John R. Helmsworth

MODEL NO. MP 005A

SERIAL NO. 1205541

**National
Technical
Systems**

REF. NO. MIL-STD 705; 60A.2

SHEET 30 OF 22

DATE 25 JAN 1988

JOE NO. 555-2140

PROJ. ENCR.

RECORDED/OBSERVER JS/Km/cr

FREQUENCY AND VOLTAGE STABILITY TEST
(77N: TERN)

INST TIME	STEP NO.	LOAD STEP	E 6000 0 VOLTAGE			E 6000 0 AMPERES x10			E 6230 0 KILOWATTS x10			E 6240 0 POWER PF	E 6240 0 FREQ. Hz	E 6240 0 EXCITER		E 6250 0 FIELD AMPS	AMB. TEMP. °F
			L1- VAC	L2- VAC	L3- VAC	L1- AC AMPS	L2- AC AMPS	L3- AC AMPS	L1- Kw	L2- Kw	L3- Kw			VOLTS VDC	AMPS DCA		
335		N/C	121	121.5	121							61.2	61.2	3.9	1.5	124	125/125
404		N/C	121	121	121							61.2	61.2	3.9	1.5	125	125/125
435		N/C	121	121	121							61.2	61.2	3.9	1.5	125	125/125
505		N/C	121	121.1	121							61.1	61.1	3.9	1.5	125	125/125
535		N/C	121	121	121							61.2	61.2	3.9	1.5	126	126/126
605		N/C	121	121.5	121							61.25	61.25	3.9	1.5	125	125/125
635		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.8	3.9	3.5	125	125
636		N/C	120	120.5	121	2.54	2.56	2.57	.25	.252	.252	80	60.4	3.9	3.5	126	126
		N/C	120	120.5	121	2.54	2.56	2.57	.25	.252	.252	80	59.6	3.9	3.5	125	125
		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
1640		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	121	121.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	120	120.5	121	2.53	2.55	2.55	.25	.252	.252	80	59.6	3.9	3.5	126	126
		N/C	121	121.													

B-90

316

1 OF 30 SHEETS

DATE 4 FEB 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER**NTS**

**National
Scientific
Testing Division**

Technical Services
P.O. Box 36

Systems	Group	Hartwood, Virginia 22471
1	1	1
2	2	2
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100	100	100

tel: 703 752 5300

FREQUENCY AND VOLUME STABILITY

(Long Term) Method 608.2

ITEM 30KW 60Hz

GEN SET

MODIFIED

MFG:R. JOHN R HOLLINGSWORTH

MODEL NO. ME8 005A

SERIAL NO. 42 05841

[illegible]

NOTES:

FREE + UNICE STATION (LUNG TERM) 608.2

BEGIN SCAN GROUP 1 23 JAN 88 06:49:21
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	87.094	DEG.	F
C	2	EXHAUST 2	86.938	DEG.	F
C	3	EXHAUST 3	87.196	DEG.	F
C	4	EXHAUST 4	87.272	DEG.	F
C	5	EXHAUST 5	87.272	DEG.	F
C	6	EXHAUST 6	87.579	DEG.	F
C	7	ENG. COOL. IN	81.638	DEG.	F
C	8	ENG. COOL. OUT	86.314	DEG.	F
C	9	OIL SUMP	84.659	DEG.	F
C	10	OIL GALLERY	86.335	DEG.	F
C	13	ENG. INTAKE	86.943	DEG.	F
C	14	RAD. TOP LEFT	84.112	DEG.	F
C	15	RAD. BTM LEFT	82.838	DEG.	F
C	16	RAD. TOP RIGHT	84.294	DEG.	F
C	17	RAD. BTM RIGHT	81.685	DEG.	F
C	18	GEN. AIR IN	84.882	DEG.	F
C	19	GEN. AIR OUT	82.527	DEG.	F
C	20	GEN. FRAME TOP	87.245	DEG.	F
C	21	GEN. FRAME BTM	82.579	DEG.	F
C	22	GEN. EXCITER	84.773	DEG.	F
C	23	GEN. VOLT. REG.	82.627	DEG.	F
C	24	CONTROL PANEL	83.318	DEG.	F
C	25	RELAY AREA	85.857	DEG.	F
C	26	BATTERY LEFT	86.183	DEG.	F
C	27	BATTERY RIGHT	85.185	DEG.	F
C	28	AIR IN SET	183.83	DEG.	F
C	29	FUEL TANK	66.599	DEG.	F
C	30	FUEL OUTLET	83.998	DEG.	F

END SCAN GROUP 1 23 JAN 88 06:49:38

STOPPED SINGLE SCAN 23 JAN 88 06:49:38

BEGIN SCAN GROUP 1 23 JAN 88 06:56:55
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	728.74	DEG.	F
C	2	EXHAUST 2	688.82	DEG.	F
C	3	EXHAUST 3	685.39	DEG.	F
C	4	EXHAUST 4	738.84	DEG.	F
C	5	EXHAUST 5	787.97	DEG.	F
C	6	EXHAUST 6	689.73	DEG.	F
C	7	ENG. COOL. IN	87.858	DEG.	F
C	8	ENG. COOL. OUT	129.13	DEG.	F
C	9	OIL SUMP	189.77	DEG.	F
C	10	OIL GALLERY	113.25	DEG.	F
C	13	ENG. INTAKE	182.31	DEG.	F
C	14	RAD. TOP LEFT	189.76	DEG.	F
C	15	RAD. BTM LEFT	111.88	DEG.	F
C	16	RAD. TOP RIGHT	111.12	DEG.	F
C	17	RAD. BTM RIGHT	96.483	DEG.	F
C	18	GEN. AIR IN	93.281	DEG.	F
C	19	GEN. AIR OUT	98.244	DEG.	F
C	20	GEN. FRAME TOP	91.933	DEG.	F
C	21	GEN. FRAME BTM	87.323	DEG.	F
C	22	GEN. EXCITER	96.983	DEG.	F
C	23	GEN. VOLT. REG.	85.882	DEG.	F
C	24	CONTROL PANEL	87.142	DEG.	F
C	25	RELAY AREA	95.648	DEG.	F
C	26	BATTERY LEFT	92.643	DEG.	F
C	27	BATTERY RIGHT	98.838	DEG.	F
C	28	AIR IN SET	111.79	DEG.	F
C	29	FUEL TANK	67.219	DEG.	F
C	30	FUEL OUTLET	87.931	DEG.	F

END SCAN GROUP 1 23 JAN 88 06:57:04

STOPPED SINGLE SCAN 23 JAN 88 06:57:04

BEGIN SCAN GROUP 1 23 JAN 88 07:09:51
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	888.29	DEG.	F
C	2	EXHAUST 2	767.12	DEG.	F
C	3	EXHAUST 3	763.94	DEG.	F
C	4	EXHAUST 4	813.49	DEG.	F
C	5	EXHAUST 5	868.43	DEG.	F
C	6	EXHAUST 6	798.64	DEG.	F
C	7	ENG. COOL. IN	194.88	DEG.	F
C	8	ENG. COOL. OUT	283.66	DEG.	F
C	9	OIL SUMP	192.45	DEG.	F
C	10	OIL GALLERY	194.88	DEG.	F
C	13	ENG. INTAKE	136.25	DEG.	F
C	14	RAD. TOP LEFT	156.72	DEG.	F
C	15	RAD. BTM LEFT	143.99	DEG.	F
C	16	RAD. TOP RIGHT	139.72	DEG.	F
C	17	RAD. BTM RIGHT	119.27	DEG.	F
C	18	GEN. AIR IN	125.74	DEG.	F
C	19	GEN. AIR OUT	125.59	DEG.	F
C	20	GEN. FRAME TOP	121.61	DEG.	F
C	21	GEN. FRAME BTM	116.88	DEG.	F
C	22	GEN. EXCITER	135.19	DEG.	F
C	23	GEN. VOLT. REG.	183.29	DEG.	F
C	24	CONTROL PANEL	189.89	DEG.	F
C	25	RELAY AREA	129.37	DEG.	F
C	26	BATTERY LEFT	127.28	DEG.	F
C	27	BATTERY RIGHT	118.82	DEG.	F
C	28	AIR IN SET	126.69	DEG.	F
C	29	FUEL TANK	69.312	DEG.	F
C	30	FUEL OUTLET	118.19	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:18:08

STOPPED SINGLE SCAN 23 JAN 88 07:18:08

BEGIN SCAN GROUP 1 23 JAN 88 07:19:58
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	889.87	DEG.	F
C	2	EXHAUST 2	767.36	DEG.	F
C	3	EXHAUST 3	772.75	DEG.	F
C	4	EXHAUST 4	816.78	DEG.	F
C	5	EXHAUST 5	867.23	DEG.	F
C	6	EXHAUST 6	793.58	DEG.	F
C	7	ENG. COOL. IN	288.93	DEG.	F
C	8	ENG. COOL. OUT	218.46	DEG.	F
C	9	OIL SUMP	217.16	DEG.	F
C	10	OIL GALLERY	217.99	DEG.	F
C	13	ENG. INTAKE	137.52	DEG.	F
C	14	RAD. TOP LEFT	159.13	DEG.	F
C	15	RAD. BTM LEFT	146.76	DEG.	F
C	16	RAD. TOP RIGHT	142.81	DEG.	F
C	17	RAD. BTM RIGHT	126.51	DEG.	F
C	18	GEN. AIR IN	121.88	DEG.	F
C	19	GEN. AIR OUT	132.85	DEG.	F
C	20	GEN. FRAME TOP	128.48	DEG.	F
C	21	GEN. FRAME BTM	122.99	DEG.	F
C	22	GEN. EXCITER	138.63	DEG.	F
C	23	GEN. VOLT. REG.	116.85	DEG.	F
C	24	CONTROL PANEL	122.38	DEG.	F
C	25	RELAY AREA	131.72	DEG.	F
C	26	BATTERY LEFT	135.54	DEG.	F
C	27	BATTERY RIGHT	123.95	DEG.	F
C	28	AIR IN SET	123.89	DEG.	F
C	29	FUEL TANK	71.553	DEG.	F
C	30	FUEL OUTLET	132.49	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:20:00

STOPPED SINGLE SCAN 23 JAN 88 07:20:00

BEGIN SCAN GROUP 1 23 JAN 88 07:24:48
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	803.86	DEG.	F
C	2	EXHAUST 2	759.83	DEG.	F
C	3	EXHAUST 3	778.18	DEG.	F
C	4	EXHAUST 4	814.63	DEG.	F
C	5	EXHAUST 5	863.83	DEG.	F
C	6	EXHAUST 6	789.88	DEG.	F
C	7	ENG. COOL. IN	281.18	DEG.	F
C	8	ENG. COOL. OUT	218.53	DEG.	F
C	9	OIL SUMP	223.13	DEG.	F
C	10	OIL GALLERY	224.88	DEG.	F
C	13	ENG. INTAKE	136.49	DEG.	F
C	14	RAD. TOP LEFT	168.36	DEG.	F
C	15	RAD. BTM LEFT	147.37	DEG.	F
C	16	RAD. TOP RIGHT	144.38	DEG.	F
C	17	RAD. BTM RIGHT	128.69	DEG.	F
C	18	GEN. AIR IN	123.89	DEG.	F
C	19	GEN. AIR OUT	134.41	DEG.	F
C	20	GEN. FRAME TOP	129.97	DEG.	F
C	21	GEN. FRAME BTM	123.88	DEG.	F
C	22	GEN. EXCITER	138.13	DEG.	F
C	23	GEN. VOLT. REG.	128.87	DEG.	F
C	24	CONTROL PANEL	126.34	DEG.	F
C	25	RELAY AREA	132.38	DEG.	F
C	26	BATTERY LEFT	137.58	DEG.	F
C	27	BATTERY RIGHT	124.98	DEG.	F
C	28	AIR IN SET	125.52	DEG.	F
C	29	FUEL TANK	72.825	DEG.	F
C	30	FUEL OUTLET	135.35	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:24:57

STOPPED SINGLE SCAN 23 JAN 88 07:24:57

BEGIN SCAN GROUP 1 23 JAN 88 07:35:22
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	888.77	DEG.	F
C	2	EXHAUST 2	759.87	DEG.	F
C	3	EXHAUST 3	772.83	DEG.	F
C	4	EXHAUST 4	813.36	DEG.	F
C	5	EXHAUST 5	863.55	DEG.	F
C	6	EXHAUST 6	788.48	DEG.	F
C	7	ENG. COOL. IN	282.54	DEG.	F
C	8	ENG. COOL. OUT	212.19	DEG.	F
C	9	OIL SUMP	238.76	DEG.	F
C	10	OIL GALLERY	231.22	DEG.	F
C	13	ENG. INTAKE	135.96	DEG.	F
C	14	RAD. TOP LEFT	168.37	DEG.	F
C	15	RAD. BTM LEFT	147.27	DEG.	F
C	16	RAD. TOP RIGHT	144.76	DEG.	F
C	17	RAD. BTM RIGHT	131.43	DEG.	F
C	18	GEN. AIR IN	128.38	DEG.	F
C	19	GEN. AIR OUT	137.85	DEG.	F
C	20	GEN. FRAME TOP	131.98	DEG.	F
C	21	GEN. FRAME BTM	125.64	DEG.	F
C	22	GEN. EXCITER	138.67	DEG.	F
C	23	GEN. VOLT. REG.	126.28	DEG.	F
C	24	CONTROL PANEL	131.27	DEG.	F
C	25	RELAY AREA	132.31	DEG.	F
C	26	BATTERY LEFT	148.28	DEG.	F
C	27	BATTERY RIGHT	127.48	DEG.	F
C	28	AIR IN SET	123.49	DEG.	F
C	29	FUEL TANK	75.676	DEG.	F
C	30	FUEL OUTLET	139.22	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:35:32

STOPPED SINGLE SCAN 23 JAN 88 07:35:32

BEGIN SCAN GROUP 1 23 JAN 88 07:45:01
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	813.98	DEG.	F
C	2	EXHAUST 2	759.98	DEG.	F
C	3	EXHAUST 3	774.42	DEG.	F
C	4	EXHAUST 4	814.28	DEG.	F
C	5	EXHAUST 5	864.79	DEG.	F
C	6	EXHAUST 6	798.46	DEG.	F
C	7	ENG. COOL. IN	283.54	DEG.	F
C	8	ENG. COOL. OUT	213.49	DEG.	F
C	9	OIL SUMP	233.49	DEG.	F
C	10	OIL GALLERY	234.85	DEG.	F
C	13	ENG. INTAKE	136.81	DEG.	F
C	14	RAD. TOP LEFT	161.82	DEG.	F
C	15	RAD. BTM LEFT	148.61	DEG.	F
C	16	RAD. TOP RIGHT	146.25	DEG.	F
C	17	RAD. BTM RIGHT	133.26	DEG.	F
C	18	GEN. AIR IN	121.84	DEG.	F
C	19	GEN. AIR OUT	139.41	DEG.	F
C	20	GEN. FRAME TOP	133.67	DEG.	F
C	21	GEN. FRAME BTM	127.83	DEG.	F
C	22	GEN. EXCITER	148.28	DEG.	F
C	23	GEN. VOLT. REG.	129.86	DEG.	F
C	24	CONTROL PANEL	133.58	DEG.	F
C	25	RELAY AREA	133.59	DEG.	F
C	26	BATTERY LEFT	141.67	DEG.	F
C	27	BATTERY RIGHT	129.23	DEG.	F
C	28	AIR IN SET	124.45	DEG.	F
C	29	FUEL TANK	78.221	DEG.	F
C	30	FUEL OUTLET	142.32	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:45:18

STOPPED SINGLE SCAN 23 JAN 88 07:45:18

BEGIN SCAN GROUP 1 23 JAN 88 07:55:06
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	818.33	DEG.	F
C	2	EXHAUST 2	763.65	DEG.	F
C	3	EXHAUST 3	788.36	DEG.	F
C	4	EXHAUST 4	816.84	DEG.	F
C	5	EXHAUST 5	868.63	DEG.	F
C	6	EXHAUST 6	793.98	DEG.	F
C	7	ENG. COOL. IN	285.35	DEG.	F
C	8	ENG. COOL. OUT	215.11	DEG.	F
C	9	OIL SUMP	235.31	DEG.	F
C	10	OIL GALLERY	236.83	DEG.	F
C	13	ENG. INTAKE	137.97	DEG.	F
C	14	RAD. TOP LEFT	162.98	DEG.	F
C	15	RAD. BTM LEFT	149.73	DEG.	F
C	16	RAD. TOP RIGHT	147.54	DEG.	F
C	17	RAD. BTM RIGHT	135.27	DEG.	F
C	18	GEN. AIR IN	122.22	DEG.	F
C	19	GEN. AIR OUT	141.58	DEG.	F
C	20	GEN. FRAME TOP	135.43	DEG.	F
C	21	GEN. FRAME BTM	128.45	DEG.	F
C	22	GEN. EXCITER	148.35	DEG.	F
C	23	GEN. VOLT. REG.	131.36	DEG.	F
C	24	CONTROL PANEL	135.26	DEG.	F
C	25	RELAY AREA	134.49	DEG.	F
C	26	BATTERY LEFT	143.59	DEG.	F
C	27	BATTERY RIGHT	138.98	DEG.	F
C	28	AIR IN SET	125.57	DEG.	F
C	29	FUEL TANK	81.252	DEG.	F
C	30	FUEL OUTLET	144.82	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:55:15

STOPPED SINGLE SCAN 23 JAN 88 07:55:15

BEGIN SCAN GROUP 1 23 JAN 88 07:57:54
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	815.33	DEG.	F
C	2	EXHAUST 2	763.31	DEG.	F
C	3	EXHAUST 3	778.06	DEG.	F
C	4	EXHAUST 4	818.41	DEG.	F
C	5	EXHAUST 5	871.37	DEG.	F
C	6	EXHAUST 6	796.83	DEG.	F
C	7	ENG. COOL. IN	285.56	DEG.	F
C	8	ENG. COOL. OUT	215.48	DEG.	F
C	9	OIL SUMP	235.64	DEG.	F
C	10	OIL GALLERY	236.47	DEG.	F
C	13	ENG. INTAKE	138.13	DEG.	F
C	14	RAD. TOP LEFT	162.96	DEG.	F
C	15	RAD. BTM LEFT	158.81	DEG.	F
C	16	RAD. TOP RIGHT	147.75	DEG.	F
C	17	RAD. BTM RIGHT	135.65	DEG.	F
C	18	GEN. AIR IN	121.98	DEG.	F
C	19	GEN. AIR OUT	141.91	DEG.	F
C	20	GEN. FRAME TOP	135.81	DEG.	F
C	21	GEN. FRAME BTM	128.73	DEG.	F
C	22	GEN. EXCITER	148.92	DEG.	F
C	23	GEN. VOLT. REG.	131.94	DEG.	F
C	24	CONTROL PANEL	135.72	DEG.	F
C	25	RELAY AREA	135.82	DEG.	F
C	26	BATTERY LEFT	144.84	DEG.	F
C	27	BATTERY RIGHT	131.67	DEG.	F
C	28	AIR IN SET	125.64	DEG.	F
C	29	FUEL TANK	81.514	DEG.	F
C	30	FUEL OUTLET	144.61	DEG.	F

END SCAN GROUP 1 23 JAN 88 07:58:04

STOPPED SINGLE SCAN 23 JAN 88 07:58:04

BEGIN SCAN GROUP 1 23 JAN 88 08:30:00
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	828.87	DEG.	F
C	2	EXHAUST 2	768.71	DEG.	F
C	3	EXHAUST 3	782.18	DEG.	F
C	4	EXHAUST 4	822.77	DEG.	F
C	5	EXHAUST 5	875.65	DEG.	F
C	6	EXHAUST 6	798.55	DEG.	F
C	7	ENG. COOL. IN	286.68	DEG.	F
C	8	ENG. COOL. OUT	216.58	DEG.	F
C	9	OIL SUMP	237.67	DEG.	F
C	10	OIL GALLERY	238.41	DEG.	F
C	13	ENG. INTAKE	138.41	DEG.	F
C	14	RAD. TOP LEFT	163.46	DEG.	F
C	15	RAD. BTM LEFT	158.91	DEG.	F
C	16	RAD. TOP RIGHT	149.39	DEG.	F
C	17	RAD. BTM RIGHT	138.88	DEG.	F
C	18	GEN. AIR IN	122.43	DEG.	F
C	19	GEN. AIR OUT	144.39	DEG.	F
C	20	GEN. FRAME TOP	137.54	DEG.	F
C	21	GEN. FRAME BTM	138.13	DEG.	F
C	22	GEN. EXCITER	141.46	DEG.	F
C	23	GEN. VOLT. REG.	135.38	DEG.	F
C	24	CONTROL PANEL	138.89	DEG.	F
C	25	RELAY AREA	135.61	DEG.	F
C	26	BATTERY LEFT	145.83	DEG.	F
C	27	BATTERY RIGHT	135.66	DEG.	F
C	28	AIR IN SET	126.89	DEG.	F
C	29	FUEL TANK	90.566	DEG.	F
C	30	FUEL OUTLET	147.38	DEG.	F

END SCAN GROUP 1 23 JAN 88 08:30:10

STOPPED SINGLE SCAN 23 JAN 88 08:30:10

BEGIN SCAN GROUP 1 23 JAN 88 09:00:07
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	815.63	DEG.	F
C	2	EXHAUST 2	761.51	DEG.	F
C	3	EXHAUST 3	782.64	DEG.	F
C	4	EXHAUST 4	819.14	DEG.	F
C	5	EXHAUST 5	871.28	DEG.	F
C	6	EXHAUST 6	795.39	DEG.	F
C	7	ENG. COOL. IN	286.42	DEG.	F
C	8	ENG. COOL. OUT	216.12	DEG.	F
C	9	OIL SUMP	237.82	DEG.	F
C	10	OIL GALLERY	238.52	DEG.	F
C	13	ENG. INTAKE	137.34	DEG.	F
C	14	RAD. TOP LEFT	164.88	DEG.	F
C	15	RAD. BTM LEFT	158.19	DEG.	F
C	16	RAD. TOP RIGHT	148.55	DEG.	F
C	17	RAD. BTM RIGHT	138.72	DEG.	F
C	18	GEN. AIR IN	122.17	DEG.	F
C	19	GEN. AIR OUT	144.75	DEG.	F
C	20	GEN. FRAME TOP	137.64	DEG.	F
C	21	GEN. FRAME BTM	138.21	DEG.	F
C	22	GEN. EXCITER	141.64	DEG.	F
C	23	GEN. VOLT. REG.	136.34	DEG.	F
C	24	CONTROL PANEL	138.73	DEG.	F
C	25	RELAY AREA	134.99	DEG.	F
C	26	BATTERY LEFT	146.52	DEG.	F
C	27	BATTERY RIGHT	138.17	DEG.	F
C	28	AIR IN SET	125.71	DEG.	F
C	29	FUEL TANK	97.687	DEG.	F
C	30	FUEL OUTLET	147.24	DEG.	F

END SCAN GROUP 1 23 JAN 88 09:00:16

STOPPED SINGLE SCAN 23 JAN 88 09:00:16

BEGIN SCAN GROUP 1 23 JAN 88 09:30:24
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	818.78	DEG.	F
C	2	EXHAUST 2	766.81	DEG.	F
C	3	EXHAUST 3	786.39	DEG.	F
C	4	EXHAUST 4	824.86	DEG.	F
C	5	EXHAUST 5	874.98	DEG.	F
C	6	EXHAUST 6	797.87	DEG.	F
C	7	ENG. COOL. IN	287.52	DEG.	F
C	8	ENG. COOL. OUT	217.32	DEG.	F
C	9	OIL SUMP	238.48	DEG.	F
C	10	OIL GALLERY	239.19	DEG.	F
C	13	ENG. INTAKE	138.57	DEG.	F
C	14	RAD. TOP LEFT	164.67	DEG.	F
C	15	RAD. BTM LEFT	151.57	DEG.	F
C	16	RAD. TOP RIGHT	158.11	DEG.	F
C	17	RAD. BTM RIGHT	148.83	DEG.	F
C	18	GEN. AIR IN	122.76	DEG.	F
C	19	GEN. AIR OUT	145.82	DEG.	F
C	20	GEN. FRAME TOP	138.82	DEG.	F
C	21	GEN. FRAME BTM	131.33	DEG.	F
C	22	GEN. EXCITER	143.29	DEG.	F
C	23	GEN. VOLT. REG.	137.33	DEG.	F
C	24	CONTROL PANEL	139.89	DEG.	F
C	25	RELAY AREA	135.98	DEG.	F
C	26	BATTERY LEFT	148.31	DEG.	F
C	27	BATTERY RIGHT	148.38	DEG.	F
C	28	AIR IN SET	126.88	DEG.	F
C	29	FUEL TANK	184.87	DEG.	F
C	30	FUEL OUTLET	148.29	DEG.	F

END SCAN GROUP 1 23 JAN 88 09:30:33

STOPPED SINGLE SCAN 23 JAN 88 09:30:33

BEGIN SCAN GROUP 1 23 JAN 88 10:00:01
38 KM/60 HZ GEN SET 5/N K20 5841

C	1	EXHAUST 1	817.26	DEG.	F
C	2	EXHAUST 2	764.89	DEG.	F
C	3	EXHAUST 3	780.00	DEG.	F
C	4	EXHAUST 4	819.81	DEG.	F
C	5	EXHAUST 5	875.21	DEG.	F
C	6	EXHAUST 6	794.62	DEG.	F
C	7	ENG. COOL. IN	286.18	DEG.	F
C	8	ENG. COOL. OUT	216.83	DEG.	F
C	9	OIL SUMP	237.53	DEG.	F
C	10	OIL GALLERY	238.37	DEG.	F
C	13	ENG. INTAKE	136.83	DEG.	F
C	14	RAD. TOP LEFT	163.29	DEG.	F
C	15	RAD. BTM LEFT	158.00	DEG.	F
C	16	RAD. TOP RIGHT	148.93	DEG.	F
C	17	RAD. BTM RIGHT	138.84	DEG.	F
C	18	GEN. AIR IN	128.56	DEG.	F
C	19	GEN. AIR OUT	144.51	DEG.	F
C	20	GEN. FRAME TOP	137.48	DEG.	F
C	21	GEN. FRAME BTM	129.59	DEG.	F
C	22	GEN. EXCITER	141.53	DEG.	F
C	23	GEN. VOLT. REG.	136.57	DEG.	F
C	24	CONTROL PANEL	138.47	DEG.	F
C	25	RELAY AREA	134.71	DEG.	F
C	26	BATTERY LEFT	147.82	DEG.	F
C	27	BATTERY RIGHT	148.28	DEG.	F
C	28	AIR IN SET	125.18	DEG.	F
C	29	FUEL TANK	189.82	DEG.	F
C	30	FUEL OUTLET	147.92	DEG.	F

END SCAN GROUP 1 23 JAN 88 10:00:10

STOPPED SINGLE SCAN 23 JAN 88 10:00:10

BEGIN SCAN GROUP 1 23 JAN 88 10:30:02
38 KM/60 HZ GEN SET 5/N K20 5841

C	1	EXHAUST 1	814.67	DEG.	F
C	2	EXHAUST 2	762.64	DEG.	F
C	3	EXHAUST 3	777.48	DEG.	F
C	4	EXHAUST 4	816.38	DEG.	F
C	5	EXHAUST 5	869.23	DEG.	F
C	6	EXHAUST 6	798.76	DEG.	F
C	7	ENG. COOL. IN	285.39	DEG.	F
C	8	ENG. COOL. OUT	215.83	DEG.	F
C	9	OIL SUMP	237.18	DEG.	F
C	10	OIL GALLERY	238.00	DEG.	F
C	13	ENG. INTAKE	135.38	DEG.	F
C	14	RAD. TOP LEFT	162.43	DEG.	F
C	15	RAD. BTM LEFT	148.55	DEG.	F
C	16	RAD. TOP RIGHT	147.81	DEG.	F
C	17	RAD. BTM RIGHT	138.49	DEG.	F
C	18	GEN. AIR IN	128.19	DEG.	F
C	19	GEN. AIR OUT	143.63	DEG.	F
C	20	GEN. FRAME TOP	136.53	DEG.	F
C	21	GEN. FRAME BTM	128.58	DEG.	F
C	22	GEN. EXCITER	141.28	DEG.	F
C	23	GEN. VOLT. REG.	136.00	DEG.	F
C	24	CONTROL PANEL	137.39	DEG.	F
C	25	RELAY AREA	133.41	DEG.	F
C	26	BATTERY LEFT	148.33	DEG.	F
C	27	BATTERY RIGHT	142.81	DEG.	F
C	28	AIR IN SET	124.50	DEG.	F
C	29	FUEL TANK	113.24	DEG.	F
C	30	FUEL OUTLET	147.64	DEG.	F

END SCAN GROUP 1 23 JAN 88 10:30:11

STOPPED SINGLE SCAN 23 JAN 88 10:30:11

BEGIN SCAN GROUP 1 23 JAN 88 11:00:01
38 KM/60 HZ GEN SET 5/N K20 5841

C	1	EXHAUST 1	814.26	DEG.	F
C	2	EXHAUST 2	766.63	DEG.	F
C	3	EXHAUST 3	780.14	DEG.	F
C	4	EXHAUST 4	819.86	DEG.	F
C	5	EXHAUST 5	872.71	DEG.	F
C	6	EXHAUST 6	796.12	DEG.	F
C	7	ENG. COOL. IN	286.83	DEG.	F
C	8	ENG. COOL. OUT	215.79	DEG.	F
C	9	OIL SUMP	236.79	DEG.	F
C	10	OIL GALLERY	237.52	DEG.	F
C	13	ENG. INTAKE	136.93	DEG.	F
C	14	RAD. TOP LEFT	162.66	DEG.	F
C	15	RAD. BTM LEFT	158.48	DEG.	F
C	16	RAD. TOP RIGHT	148.93	DEG.	F
C	17	RAD. BTM RIGHT	138.71	DEG.	F
C	18	GEN. AIR IN	128.76	DEG.	F
C	19	GEN. AIR OUT	144.21	DEG.	F
C	20	GEN. FRAME TOP	137.33	DEG.	F
C	21	GEN. FRAME BTM	129.38	DEG.	F
C	22	GEN. EXCITER	141.53	DEG.	F
C	23	GEN. VOLT. REG.	135.59	DEG.	F
C	24	CONTROL PANEL	137.58	DEG.	F
C	25	RELAY AREA	134.76	DEG.	F
C	26	BATTERY LEFT	148.93	DEG.	F
C	27	BATTERY RIGHT	143.15	DEG.	F
C	28	AIR IN SET	125.31	DEG.	F
C	29	FUEL TANK	116.58	DEG.	F
C	30	FUEL OUTLET	148.14	DEG.	F

END SCAN GROUP 1 23 JAN 88 11:00:10

STOPPED SINGLE SCAN 23 JAN 88 11:00:11

BEGIN SCAN GROUP 1 23 JAN 88 11:30:23
38 KM/60 HZ GEN SET 5/N K20 5841

C	1	EXHAUST 1	815.18	DEG.	F
C	2	EXHAUST 2	763.39	DEG.	F
C	3	EXHAUST 3	778.93	DEG.	F
C	4	EXHAUST 4	828.32	DEG.	F
C	5	EXHAUST 5	878.25	DEG.	F
C	6	EXHAUST 6	794.66	DEG.	F
C	7	ENG. COOL. IN	286.34	DEG.	F
C	8	ENG. COOL. OUT	216.86	DEG.	F
C	9	OIL SUMP	237.89	DEG.	F
C	10	OIL GALLERY	238.55	DEG.	F
C	13	ENG. INTAKE	136.51	DEG.	F
C	14	RAD. TOP LEFT	163.23	DEG.	F
C	15	RAD. BTM LEFT	149.63	DEG.	F
C	16	RAD. TOP RIGHT	146.96	DEG.	F
C	17	RAD. BTM RIGHT	139.55	DEG.	F
C	18	GEN. AIR IN	121.48	DEG.	F
C	19	GEN. AIR OUT	144.62	DEG.	F
C	20	GEN. FRAME TOP	137.42	DEG.	F
C	21	GEN. FRAME BTM	129.98	DEG.	F
C	22	GEN. EXCITER	141.66	DEG.	F
C	23	GEN. VOLT. REG.	136.51	DEG.	F
C	24	CONTROL PANEL	138.48	DEG.	F
C	25	RELAY AREA	134.36	DEG.	F
C	26	BATTERY LEFT	158.68	DEG.	F
C	27	BATTERY RIGHT	144.99	DEG.	F
C	28	AIR IN SET	126.27	DEG.	F
C	29	FUEL TANK	119.59	DEG.	F
C	30	FUEL OUTLET	148.55	DEG.	F

END SCAN GROUP 1 23 JAN 88 11:30:32

STOPPED SINGLE SCAN 23 JAN 88 11:30:32

BEGIN SCAN GROUP 1 23 JAN 88 12:00:00
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	818.50	DEG.	F
C	2	EXHAUST 2	763.24	DEG.	F
C	3	EXHAUST 3	782.89	DEG.	F
C	4	EXHAUST 4	822.64	DEG.	F
C	5	EXHAUST 5	878.49	DEG.	F
C	6	EXHAUST 6	881.93	DEG.	F
C	7	ENG. COOL. IN	286.52	DEG.	F
C	8	ENG. COOL. OUT	216.17	DEG.	F
C	9	OIL SUMP	237.65	DEG.	F
C	10	OIL GALLERY	238.54	DEG.	F
C	13	ENG. INTAKE	136.55	DEG.	F
C	14	RAD. TOP LEFT	163.57	DEG.	F
C	15	RAD. BTM LEFT	149.95	DEG.	F
C	16	RAD. TOP RIGHT	149.12	DEG.	F
C	17	RAD. BTM RIGHT	139.68	DEG.	F
C	18	GEN. AIR IN	121.38	DEG.	F
C	19	GEN. AIR OUT	144.78	DEG.	F
C	20	GEN. FRAME TOP	137.58	DEG.	F
C	21	GEN. FRAME BTM	129.88	DEG.	F
C	22	GEN. EXCITER	141.14	DEG.	F
C	23	GEN. VOLT. REG.	136.51	DEG.	F
C	24	CONTROL PANEL	138.32	DEG.	F
C	25	RELAY AREA	134.44	DEG.	F
C	26	BATTERY LEFT	151.37	DEG.	F
C	27	BATTERY RIGHT	146.86	DEG.	F
C	28	AIR IN SET	125.37	DEG.	F
C	29	FUEL TANK	121.99	DEG.	F
C	30	FUEL OUTLET	148.63	DEG.	F

END SCAN GROUP 1 23 JAN 88 12:00:02

STOPPED SINGLE SCAN 23 JAN 88 12:00:18

BEGIN SCAN GROUP 1 23 JAN 88 12:01:43
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	447.13	DEG.	F
C	2	EXHAUST 2	441.39	DEG.	F
C	3	EXHAUST 3	453.58	DEG.	F
C	4	EXHAUST 4	535.87	DEG.	F
C	5	EXHAUST 5	551.88	DEG.	F
C	6	EXHAUST 6	583.36	DEG.	F
C	7	ENG. COOL. IN	284.46	DEG.	F
C	8	ENG. COOL. OUT	213.37	DEG.	F
C	9	OIL SUMP	237.66	DEG.	F
C	10	OIL GALLERY	238.49	DEG.	F
C	13	ENG. INTAKE	136.52	DEG.	F
C	14	RAD. TOP LEFT	162.61	DEG.	F
C	15	RAD. BTM LEFT	149.48	DEG.	F
C	16	RAD. TOP RIGHT	148.92	DEG.	F
C	17	RAD. BTM RIGHT	139.63	DEG.	F
C	18	GEN. AIR IN	122.17	DEG.	F
C	19	GEN. AIR OUT	144.72	DEG.	F
C	20	GEN. FRAME TOP	137.78	DEG.	F
C	21	GEN. FRAME BTM	129.93	DEG.	F
C	22	GEN. EXCITER	141.23	DEG.	F
C	23	GEN. VOLT. REG.	136.56	DEG.	F
C	24	CONTROL PANEL	138.88	DEG.	F
C	25	RELAY AREA	134.71	DEG.	F
C	26	BATTERY LEFT	151.23	DEG.	F
C	27	BATTERY RIGHT	146.51	DEG.	F
C	28	AIR IN SET	126.76	DEG.	F
C	29	FUEL TANK	122.24	DEG.	F
C	30	FUEL OUTLET	149.64	DEG.	F

END SCAN GROUP 1 23 JAN 88 12:01:52

STOPPED SINGLE SCAN 23 JAN 88 12:01:52

BEGIN SCAN GROUP 1 23 JAN 88 12:12:17
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	311.95	DEG.	F
C	2	EXHAUST 2	292.37	DEG.	F
C	3	EXHAUST 3	381.64	DEG.	F
C	4	EXHAUST 4	482.58	DEG.	F
C	5	EXHAUST 5	427.89	DEG.	F
C	6	EXHAUST 6	361.67	DEG.	F
C	7	ENG. COOL. IN	174.87	DEG.	F
C	8	ENG. COOL. OUT	182.85	DEG.	F
C	9	OIL SUMP	223.16	DEG.	F
C	10	OIL GALLERY	223.97	DEG.	F
C	13	ENG. INTAKE	129.67	DEG.	F
C	14	RAD. TOP LEFT	146.88	DEG.	F
C	15	RAD. BTM LEFT	138.77	DEG.	F
C	16	RAD. TOP RIGHT	148.45	DEG.	F
C	17	RAD. BTM RIGHT	136.16	DEG.	F
C	18	GEN. AIR IN	123.13	DEG.	F
C	19	GEN. AIR OUT	138.82	DEG.	F
C	20	GEN. FRAME TOP	132.68	DEG.	F
C	21	GEN. FRAME BTM	127.91	DEG.	F
C	22	GEN. EXCITER	137.36	DEG.	F
C	23	GEN. VOLT. REG.	134.88	DEG.	F
C	24	CONTROL PANEL	136.47	DEG.	F
C	25	RELAY AREA	129.25	DEG.	F
C	26	BATTERY LEFT	145.92	DEG.	F
C	27	BATTERY RIGHT	145.88	DEG.	F
C	28	AIR IN SET	124.45	DEG.	F
C	29	FUEL TANK	122.76	DEG.	F
C	30	FUEL OUTLET	148.85	DEG.	F

END SCAN GROUP 1 23 JAN 88 12:12:26

STOPPED SINGLE SCAN 23 JAN 88 12:12:27

BEGIN SCAN GROUP 1 23 JAN 88 12:22:03
30 KM/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	384.39	DEG.	F
C	2	EXHAUST 2	291.39	DEG.	F
C	3	EXHAUST 3	381.75	DEG.	F
C	4	EXHAUST 4	483.85	DEG.	F
C	5	EXHAUST 5	427.54	DEG.	F
C	6	EXHAUST 6	359.62	DEG.	F
C	7	ENG. COOL. IN	172.14	DEG.	F
C	8	ENG. COOL. OUT	181.61	DEG.	F
C	9	OIL SUMP	216.32	DEG.	F
C	10	OIL GALLERY	216.83	DEG.	F
C	13	ENG. INTAKE	129.53	DEG.	F
C	14	RAD. TOP LEFT	145.61	DEG.	F
C	15	RAD. BTM LEFT	137.71	DEG.	F
C	16	RAD. TOP RIGHT	139.38	DEG.	F
C	17	RAD. BTM RIGHT	134.38	DEG.	F
C	18	GEN. AIR IN	123.57	DEG.	F
C	19	GEN. AIR OUT	135.59	DEG.	F
C	20	GEN. FRAME TOP	138.76	DEG.	F
C	21	GEN. FRAME BTM	127.14	DEG.	F
C	22	GEN. EXCITER	137.39	DEG.	F
C	23	GEN. VOLT. REG.	133.43	DEG.	F
C	24	CONTROL PANEL	135.36	DEG.	F
C	25	RELAY AREA	128.62	DEG.	F
C	26	BATTERY LEFT	143.38	DEG.	F
C	27	BATTERY RIGHT	143.14	DEG.	F
C	28	AIR IN SET	124.57	DEG.	F
C	29	FUEL TANK	123.28	DEG.	F
C	30	FUEL OUTLET	147.54	DEG.	F

END SCAN GROUP 1 23 JAN 88 12:22:12

STOPPED SINGLE SCAN 23 JAN 88 12:22:12

BEGIN SCAN GROUP 1 23 JAN 88 12:32:16
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	368.45	DEG.	F
C	2	EXHAUST 2	238.35	DEG.	F
C	3	EXHAUST 3	361.99	DEG.	F
C	4	EXHAUST 4	485.12	DEG.	F
C	5	EXHAUST 5	429.15	DEG.	F
C	6	EXHAUST 6	361.65	DEG.	F
C	7	ENG. COOL. IN	172.71	DEG.	F
C	8	ENG. COOL. OUT	182.35	DEG.	F
C	9	OIL SUMP	214.89	DEG.	F
C	10	OIL GALLERY	214.38	DEG.	F
C	13	ENG. INTAKE	131.88	DEG.	F
C	14	RAD. TOP LEFT	146.59	DEG.	F
C	15	RAD. BTM LEFT	138.53	DEG.	F
C	16	RAD. TOP RIGHT	139.87	DEG.	F
C	17	RAD. BTM RIGHT	134.83	DEG.	F
C	18	GEN. AIR IN	124.87	DEG.	F
C	19	GEN. AIR OUT	135.83	DEG.	F
C	20	GEN. FRAME TOP	138.85	DEG.	F
C	21	GEN. FRAME BTM	127.83	DEG.	F
C	22	GEN. EXCITER	138.78	DEG.	F
C	23	GEN. VOLT. REG.	132.94	DEG.	F
C	24	CONTROL PANEL	135.36	DEG.	F
C	25	RELAY AREA	129.88	DEG.	F
C	26	BATTERY LEFT	143.37	DEG.	F
C	27	BATTERY RIGHT	144.89	DEG.	F
C	28	AIR IN SET	126.13	DEG.	F
C	29	FUEL TANK	123.62	DEG.	F
C	30	FUEL OUTLET	147.36	DEG.	F

END SCAN GROUP 1 23 JAN 88 12:32:25

STOPPED SINGLE SCAN 23 JAN 88 12:32:26

BEGIN SCAN GROUP 1 23 JAN 88 12:34:27
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	389.66	DEG.	F
C	2	EXHAUST 2	292.82	DEG.	F
C	3	EXHAUST 3	381.82	DEG.	F
C	4	EXHAUST 4	485.37	DEG.	F
C	5	EXHAUST 5	428.82	DEG.	F
C	6	EXHAUST 6	358.97	DEG.	F
C	7	ENG. COOL. IN	172.86	DEG.	F
C	8	ENG. COOL. OUT	182.36	DEG.	F
C	9	OIL SUMP	213.74	DEG.	F
C	10	OIL GALLERY	214.85	DEG.	F
C	13	ENG. INTAKE	131.33	DEG.	F
C	14	RAD. TOP LEFT	146.64	DEG.	F
C	15	RAD. BTM LEFT	138.56	DEG.	F
C	16	RAD. TOP RIGHT	139.93	DEG.	F
C	17	RAD. BTM RIGHT	134.24	DEG.	F
C	18	GEN. AIR IN	124.53	DEG.	F
C	19	GEN. AIR OUT	134.82	DEG.	F
C	20	GEN. FRAME TOP	138.86	DEG.	F
C	21	GEN. FRAME BTM	128.11	DEG.	F
C	22	GEN. EXCITER	139.63	DEG.	F
C	23	GEN. VOLT. REG.	132.97	DEG.	F
C	24	CONTROL PANEL	135.22	DEG.	F
C	25	RELAY AREA	129.96	DEG.	F
C	26	BATTERY LEFT	143.52	DEG.	F
C	27	BATTERY RIGHT	143.88	DEG.	F
C	28	AIR IN SET	126.33	DEG.	F
C	29	FUEL TANK	123.72	DEG.	F
C	30	FUEL OUTLET	146.74	DEG.	F

END SCAN GROUP 1 23 JAN 88 12:34:36

STOPPED SINGLE SCAN 23 JAN 88 12:34:36

BEGIN SCAN GROUP 1 23 JAN 88 13:04:08
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	387.81	DEG.	F
C	2	EXHAUST 2	295.82	DEG.	F
C	3	EXHAUST 3	384.81	DEG.	F
C	4	EXHAUST 4	485.48	DEG.	F
C	5	EXHAUST 5	428.28	DEG.	F
C	6	EXHAUST 6	357.13	DEG.	F
C	7	ENG. COOL. IN	173.58	DEG.	F
C	8	ENG. COOL. OUT	183.83	DEG.	F
C	9	OIL SUMP	213.82	DEG.	F
C	10	OIL GALLERY	213.42	DEG.	F
C	13	ENG. INTAKE	132.18	DEG.	F
C	14	RAD. TOP LEFT	147.88	DEG.	F
C	15	RAD. BTM LEFT	138.96	DEG.	F
C	16	RAD. TOP RIGHT	148.17	DEG.	F
C	17	RAD. BTM RIGHT	134.86	DEG.	F
C	18	GEN. AIR IN	124.94	DEG.	F
C	19	GEN. AIR OUT	133.82	DEG.	F
C	20	GEN. FRAME TOP	138.62	DEG.	F
C	21	GEN. FRAME BTM	128.12	DEG.	F
C	22	GEN. EXCITER	148.85	DEG.	F
C	23	GEN. VOLT. REG.	133.17	DEG.	F
C	24	CONTROL PANEL	135.49	DEG.	F
C	25	RELAY AREA	136.55	DEG.	F
C	26	BATTERY LEFT	144.29	DEG.	F
C	27	BATTERY RIGHT	144.25	DEG.	F
C	28	AIR IN SET	126.65	DEG.	F
C	29	FUEL TANK	124.78	DEG.	F
C	30	FUEL OUTLET	146.48	DEG.	F

END SCAN GROUP 1 23 JAN 88 13:04:18

STOPPED SINGLE SCAN 23 JAN 88 13:04:18

BEGIN SCAN GROUP 1 23 JAN 88 13:05:08
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	388.86	DEG.	F
C	2	EXHAUST 2	295.68	DEG.	F
C	3	EXHAUST 3	382.73	DEG.	F
C	4	EXHAUST 4	485.58	DEG.	F
C	5	EXHAUST 5	428.33	DEG.	F
C	6	EXHAUST 6	357.84	DEG.	F
C	7	ENG. COOL. IN	173.46	DEG.	F
C	8	ENG. COOL. OUT	183.88	DEG.	F
C	9	OIL SUMP	212.95	DEG.	F
C	10	OIL GALLERY	213.45	DEG.	F
C	13	ENG. INTAKE	132.85	DEG.	F
C	14	RAD. TOP LEFT	147.14	DEG.	F
C	15	RAD. BTM LEFT	138.87	DEG.	F
C	16	RAD. TOP RIGHT	148.87	DEG.	F
C	17	RAD. BTM RIGHT	134.89	DEG.	F
C	18	GEN. AIR IN	124.92	DEG.	F
C	19	GEN. AIR OUT	133.88	DEG.	F
C	20	GEN. FRAME TOP	138.57	DEG.	F
C	21	GEN. FRAME BTM	128.26	DEG.	F
C	22	GEN. EXCITER	139.95	DEG.	F
C	23	GEN. VOLT. REG.	133.22	DEG.	F
C	24	CONTROL PANEL	135.81	DEG.	F
C	25	RELAY AREA	138.45	DEG.	F
C	26	BATTERY LEFT	144.29	DEG.	F
C	27	BATTERY RIGHT	144.17	DEG.	F
C	28	AIR IN SET	126.49	DEG.	F
C	29	FUEL TANK	124.88	DEG.	F
C	30	FUEL OUTLET	146.98	DEG.	F

END SCAN GROUP 1 23 JAN 88 13:05:10

STOPPED SINGLE SCAN 23 JAN 88 13:05:10

BEGIN SCAN GROUP 1 23 JAN 88 13:35:01
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	306.67	DEG.	F
C	2	EXHAUST 2	296.73	DEG.	F
C	3	EXHAUST 3	300.87	DEG.	F
C	4	EXHAUST 4	401.66	DEG.	F
C	5	EXHAUST 5	426.02	DEG.	F
C	6	EXHAUST 6	354.70	DEG.	F
C	7	ENG. COOL. IN	171.06	DEG.	F
C	8	ENG. COOL. OUT	182.02	DEG.	F
C	9	OIL SUMP	211.91	DEG.	F
C	10	OIL GALLERY	212.45	DEG.	F
C	13	ENG. INTAKE	129.37	DEG.	F
C	14	RAD. TOP LEFT	145.65	DEG.	F
C	15	RAD. BTM LEFT	137.36	DEG.	F
C	16	RAD. TOP RIGHT	138.83	DEG.	F
C	17	RAD. BTM RIGHT	131.84	DEG.	F
C	18	GEN. AIR IN	124.07	DEG.	F
C	19	GEN. AIR OUT	131.43	DEG.	F
C	20	GEN. FRAME TOP	128.24	DEG.	F
C	21	GEN. FRAME BTM	125.71	DEG.	F
C	22	GEN. EXCITER	138.84	DEG.	F
C	23	GEN. VOLT. REG.	131.43	DEG.	F
C	24	CONTROL PANEL	134.12	DEG.	F
C	25	RELAY AREA	128.34	DEG.	F
C	26	BATTERY LEFT	143.72	DEG.	F
C	27	BATTERY RIGHT	144.70	DEG.	F
C	28	AIR IN SET	124.48	DEG.	F
C	29	FUEL TANK	125.32	DEG.	F
C	30	FUEL OUTLET	145.13	DEG.	F

END SCAN GROUP 1 23 JAN 88 13:35:10

STOPPED SINGLE SCAN 23 JAN 88 13:35:10

BEGIN SCAN GROUP 1 23 JAN 88 14:04:46
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	309.66	DEG.	F
C	2	EXHAUST 2	296.90	DEG.	F
C	3	EXHAUST 3	305.52	DEG.	F
C	4	EXHAUST 4	403.25	DEG.	F
C	5	EXHAUST 5	426.56	DEG.	F
C	6	EXHAUST 6	355.77	DEG.	F
C	7	ENG. COOL. IN	173.31	DEG.	F
C	8	ENG. COOL. OUT	183.33	DEG.	F
C	9	OIL SUMP	212.81	DEG.	F
C	10	OIL GALLERY	213.19	DEG.	F
C	13	ENG. INTAKE	131.07	DEG.	F
C	14	RAD. TOP LEFT	146.77	DEG.	F
C	15	RAD. BTM LEFT	138.66	DEG.	F
C	16	RAD. TOP RIGHT	139.84	DEG.	F
C	17	RAD. BTM RIGHT	133.01	DEG.	F
C	18	GEN. AIR IN	124.20	DEG.	F
C	19	GEN. AIR OUT	132.35	DEG.	F
C	20	GEN. FRAME TOP	129.61	DEG.	F
C	21	GEN. FRAME BTM	127.18	DEG.	F
C	22	GEN. EXCITER	140.25	DEG.	F
C	23	GEN. VOLT. REG.	131.96	DEG.	F
C	24	CONTROL PANEL	134.70	DEG.	F
C	25	RELAY AREA	129.71	DEG.	F
C	26	BATTERY LEFT	145.02	DEG.	F
C	27	BATTERY RIGHT	146.62	DEG.	F
C	28	AIR IN SET	125.44	DEG.	F
C	29	FUEL TANK	125.76	DEG.	F
C	30	FUEL OUTLET	145.52	DEG.	F

END SCAN GROUP 1 23 JAN 88 14:04:55

STOPPED SINGLE SCAN 23 JAN 88 14:04:56

BEGIN SCAN GROUP 1 23 JAN 88 14:35:15
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	313.98	DEG.	F
C	2	EXHAUST 2	298.49	DEG.	F
C	3	EXHAUST 3	306.30	DEG.	F
C	4	EXHAUST 4	403.04	DEG.	F
C	5	EXHAUST 5	426.88	DEG.	F
C	6	EXHAUST 6	356.70	DEG.	F
C	7	ENG. COOL. IN	173.66	DEG.	F
C	8	ENG. COOL. OUT	183.70	DEG.	F
C	9	OIL SUMP	213.37	DEG.	F
C	10	OIL GALLERY	213.54	DEG.	F
C	13	ENG. INTAKE	131.19	DEG.	F
C	14	RAD. TOP LEFT	146.94	DEG.	F
C	15	RAD. BTM LEFT	138.66	DEG.	F
C	16	RAD. TOP RIGHT	139.77	DEG.	F
C	17	RAD. BTM RIGHT	133.11	DEG.	F
C	18	GEN. AIR IN	123.51	DEG.	F
C	19	GEN. AIR OUT	132.28	DEG.	F
C	20	GEN. FRAME TOP	129.68	DEG.	F
C	21	GEN. FRAME BTM	127.24	DEG.	F
C	22	GEN. EXCITER	141.32	DEG.	F
C	23	GEN. VOLT. REG.	132.10	DEG.	F
C	24	CONTROL PANEL	135.27	DEG.	F
C	25	RELAY AREA	129.63	DEG.	F
C	26	BATTERY LEFT	145.42	DEG.	F
C	27	BATTERY RIGHT	146.61	DEG.	F
C	28	AIR IN SET	125.29	DEG.	F
C	29	FUEL TANK	126.14	DEG.	F
C	30	FUEL OUTLET	146.02	DEG.	F

END SCAN GROUP 1 23 JAN 88 14:35:24

STOPPED SINGLE SCAN 23 JAN 88 14:35:24

BEGIN SCAN GROUP 1 23 JAN 88 15:04:59
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	313.09	DEG.	F
C	2	EXHAUST 2	299.30	DEG.	F
C	3	EXHAUST 3	307.01	DEG.	F
C	4	EXHAUST 4	402.99	DEG.	F
C	5	EXHAUST 5	426.85	DEG.	F
C	6	EXHAUST 6	356.01	DEG.	F
C	7	ENG. COOL. IN	173.01	DEG.	F
C	8	ENG. COOL. OUT	183.05	DEG.	F
C	9	OIL SUMP	213.58	DEG.	F
C	10	OIL GALLERY	213.74	DEG.	F
C	13	ENG. INTAKE	131.40	DEG.	F
C	14	RAD. TOP LEFT	147.17	DEG.	F
C	15	RAD. BTM LEFT	138.05	DEG.	F
C	16	RAD. TOP RIGHT	139.99	DEG.	F
C	17	RAD. BTM RIGHT	133.29	DEG.	F
C	18	GEN. AIR IN	123.95	DEG.	F
C	19	GEN. AIR OUT	132.32	DEG.	F
C	20	GEN. FRAME TOP	129.66	DEG.	F
C	21	GEN. FRAME BTM	127.39	DEG.	F
C	22	GEN. EXCITER	141.30	DEG.	F
C	23	GEN. VOLT. REG.	132.21	DEG.	F
C	24	CONTROL PANEL	134.89	DEG.	F
C	25	RELAY AREA	129.70	DEG.	F
C	26	BATTERY LEFT	145.88	DEG.	F
C	27	BATTERY RIGHT	147.03	DEG.	F
C	28	AIR IN SET	125.10	DEG.	F
C	29	FUEL TANK	126.54	DEG.	F
C	30	FUEL OUTLET	145.62	DEG.	F

END SCAN GROUP 1 23 JAN 88 15:05:00

STOPPED SINGLE SCAN 23 JAN 88 15:05:00

BEGIN SCAN GROUP 1 23 JAN 88 15:35:21
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	299.41	DEG.	F
C	2	EXHAUST 2	299.28	DEG.	F
C	3	EXHAUST 3	318.88	DEG.	F
C	4	EXHAUST 4	485.54	DEG.	F
C	5	EXHAUST 5	438.24	DEG.	F
C	6	EXHAUST 6	362.39	DEG.	F
C	7	ENG. COOL. IN	173.97	DEG.	F
C	8	ENG. COOL. OUT	184.85	DEG.	F
C	9	OIL SUMP	213.53	DEG.	F
C	10	OIL GALLERY	213.82	DEG.	F
C	13	ENG. INTAKE	131.51	DEG.	F
C	14	RAD. TOP LEFT	147.21	DEG.	F
C	15	RAD. BTM LEFT	139.83	DEG.	F
C	16	RAD. TOP RIGHT	148.48	DEG.	F
C	17	RAD. BTM RIGHT	133.43	DEG.	F
C	18	GEN. AIR IN	124.75	DEG.	F
C	19	GEN. AIR OUT	132.66	DEG.	F
C	20	GEN. FRAME TOP	129.77	DEG.	F
C	21	GEN. FRAME BTM	127.44	DEG.	F
C	22	GEN. EXCITER	141.78	DEG.	F
C	23	GEN. VOLT. REG.	132.35	DEG.	F
C	24	CONTROL PANEL	135.25	DEG.	F
C	25	RELAY AREA	129.88	DEG.	F
C	26	BATTERY LEFT	146.48	DEG.	F
C	27	BATTERY RIGHT	148.15	DEG.	F
C	28	AIR IN SET	125.76	DEG.	F
C	29	FUEL TANK	126.88	DEG.	F
C	30	FUEL OUTLET	145.89	DEG.	F

END SCAN GROUP 1 23 JAN 88 15:35:38

STOPPED SINGLE SCAN 23 JAN 88 15:35:38

BEGIN SCAN GROUP 1 23 JAN 88 16:05:08
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	298.86	DEG.	F
C	2	EXHAUST 2	299.18	DEG.	F
C	3	EXHAUST 3	311.71	DEG.	F
C	4	EXHAUST 4	486.71	DEG.	F
C	5	EXHAUST 5	438.48	DEG.	F
C	6	EXHAUST 6	364.88	DEG.	F
C	7	ENG. COOL. IN	174.14	DEG.	F
C	8	ENG. COOL. OUT	184.28	DEG.	F
C	9	OIL SUMP	213.61	DEG.	F
C	10	OIL GALLERY	213.99	DEG.	F
C	13	ENG. INTAKE	131.55	DEG.	F
C	14	RAD. TOP LFT	147.44	DEG.	F
C	15	RAD. BTM LFT	139.19	DEG.	F
C	16	RAD. TOP RIGHT	148.44	DEG.	F
C	17	RAD. BTM RIGHT	133.52	DEG.	F
C	18	GEN. AIR IN	124.49	DEG.	F
C	19	GEN. AIR OUT	132.69	DEG.	F
C	20	GEN. FRAME TOP	129.81	DEG.	F
C	21	GEN. FRAME BTM	127.45	DEG.	F
C	22	GEN. EXCITER	141.45	DEG.	F
C	23	GEN. VOLT. REG.	132.43	DEG.	F
C	24	CONTROL PANEL	135.14	DEG.	F
C	25	RELAY AREA	129.98	DEG.	F
C	26	BATTERY LEFT	146.73	DEG.	F
C	27	BATTERY RIGHT	148.18	DEG.	F
C	28	AIR IN SET	125.18	DEG.	F
C	29	FUEL TANK	126.18	DEG.	F
C	30	FUEL OUTLET	146.22	DEG.	F

END SCAN GROUP 1 23 JAN 88 16:05:17

STOPPED SINGLE SCAN 23 JAN 88 16:05:18

BEGIN SCAN GROUP 1 23 JAN 88 16:35:01
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	299.84	DEG.	F
C	2	EXHAUST 2	298.26	DEG.	F
C	3	EXHAUST 3	314.76	DEG.	F
C	4	EXHAUST 4	485.66	DEG.	F
C	5	EXHAUST 5	429.66	DEG.	F
C	6	EXHAUST 6	362.52	DEG.	F
C	7	ENG. COOL. IN	174.82	DEG.	F
C	8	ENG. COOL. OUT	184.81	DEG.	F
C	9	OIL SUMP	213.73	DEG.	F
C	10	OIL GALLERY	213.78	DEG.	F
C	13	ENG. INTAKE	131.33	DEG.	F
C	14	RAD. TOP LEFT	147.21	DEG.	F
C	15	RAD. BTM LEFT	138.82	DEG.	F
C	16	RAD. TOP RIGHT	148.17	DEG.	F
C	17	RAD. BTM RIGHT	133.29	DEG.	F
C	18	GEN. AIR IN	123.87	DEG.	F
C	19	GEN. AIR OUT	132.37	DEG.	F
C	20	GEN. FRAME TOP	129.51	DEG.	F
C	21	GEN. FRAME BTM	127.23	DEG.	F
C	22	GEN. EXCITER	148.34	DEG.	F
C	23	GEN. VOLT. REG.	132.35	DEG.	F
C	24	CONTROL PANEL	135.11	DEG.	F
C	25	RELAY AREA	129.56	DEG.	F
C	26	BATTERY LEFT	146.88	DEG.	F
C	27	BATTERY RIGHT	148.82	DEG.	F
C	28	AIR IN SET	124.93	DEG.	F
C	29	FUEL TANK	127.42	DEG.	F
C	30	FUEL OUTLET	146.19	DEG.	F

END SCAN GROUP 1 23 JAN 88 16:35:11

STOPPED SINGLE SCAN 23 JAN 88 16:35:11

TEST DATA

MAS

ITEM 30KW / 60 Hz

GEN SET

MODIFIED

REFR. JOHN R HOLLINGSWORTH

MODEL NO. MEP 005A

SERIAL NO. K205841

National Scientific Testing Division

Technical Services P.O. Box 30

Systems Group Hattwood, Virginia 22471

Method 640.1 Tel: 703 752 5300

REF. NO. MIL-STD 705

SHEET 1 OF 1

DATE 25 JAN 1988

JOB NO. 555-2160

PROJ. ENGR.

RECORDER/OBSERVER KM.GC.BJ

MAX POWER

INST TIME	STEP NO.	LOAD STEP	E60280 VOLTAGE			E60400 AMPERES			E62300 KILOWATTS X40			E64120 POWER FACTOR PF	E64140 FREQ. Hz	E64270 EXCITER FIELD		AMB. TEMP. °F	PRESS. IN/H2O
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC RMS	L2-L0 AC RMS	L3-L0 AC RMS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw			VOLTS VDC	AMPS AKA		
0835			START UNIT AT 117	120	120	2.53	2.55	2.55	249	251	251	.80	60.3	2.7	3.2	73	13.5
0845		R/L	START UNIT AT 119.5	120	120	2.54	2.56	2.55	249	251	251	.80	60.3	2.7	3.2	73	13.5
0855		R/L	START UNIT AT 119.5	120	120	2.54	2.56	2.55	249	251	251	.80	60.3	2.7	3.2	73	13.5
0905		R/L	START UNIT AT 119.5	120	120	2.54	2.56	2.55	249	251	251	.80	60.3	2.7	3.2	73	13.5
0915		R/L	START UNIT AT 119.5	120	120	2.54	2.56	2.55	249	251	251	.80	60.3	2.7	3.2	73	13.5
0925		ADJUST UNIT TO	PLACED UNIT AT RATED LOAD FOR	120	120	3.06	3.09	3.08	369	370	370	1.00	60.0	4.9	2.8	76	13.2
0935		MP	APPLIED RATED LOAD FOR	120	120	3.06	3.09	3.08	369	370	370	1.00	60.0	4.9	2.8	76	13.2
0945		MP	APPLIED RATED LOAD FOR	120	120	3.06	3.09	3.08	369	370	370	1.00	60.0	4.9	2.8	76	13.2
0955		MP	APPLIED RATED LOAD FOR	120	120	3.06	3.09	3.08	369	370	370	1.00	60.0	4.9	2.8	76	13.2
1005		MP	APPLIED RATED LOAD FOR	120	120	3.06	3.09	3.08	369	370	370	1.00	60.0	4.9	2.8	76	13.2
1015		END OF TEST															
1025																	
1035																	
1045																	
1055																	
1105																	
1115																	
1125																	
1135																	
1145																	

BAROMETRIC PRESSURE = 29.59, WATER VAPOR MEASURE = 1.022, OBSERVED POWER = 44.36 KW
INTAKE AIR TEMP = 98.5 °F

B-100

MARPOWER CYO.1

BEGIN SCAN GROUP 1 25 JAN 88 08:45:20
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	745.62	DEG.	F
C	2	EXHAUST 2	714.27	DEG.	F
C	3	EXHAUST 3	717.01	DEG.	F
C	4	EXHAUST 4	757.33	DEG.	F
C	5	EXHAUST 5	802.06	DEG.	F
C	6	EXHAUST 6	737.35	DEG.	F
C	7	ENG. COOL. IN	167.50	DEG.	F
C	8	ENG. COOL. OUT	181.76	DEG.	F
C	9	OIL SUMP	161.63	DEG.	F
C	10	OIL GALLERY	163.13	DEG.	F
C	13	ENG. INTAKE	90.658	DEG.	F
C	14	RAD. TOP LEFT	117.49	DEG.	F
C	15	RAD. BTM LEFT	102.99	DEG.	F
C	16	RAD. TOP RIGHT	102.52	DEG.	F
C	17	RAD. BTM RIGHT	88.377	DEG.	F
C	18	GEN. AIR IN	72.221	DEG.	F
C	19	GEN. AIR OUT	82.844	DEG.	F
C	20	GEN. FRAME TOP	79.995	DEG.	F
C	21	GEN. FRAME BTM	76.521	DEG.	F
C	22	GEN. EXCITER	93.484	DEG.	F
C	23	GEN. VOLT. REG.	75.749	DEG.	F
C	24	CONTROL PANEL	80.381	DEG.	F
C	25	RELAY AREA	83.754	DEG.	F
C	26	BATTERY LEFT	108.47	DEG.	F
C	27	BATTERY RIGHT	98.819	DEG.	F
C	28	AIR IN SET	73.787	DEG.	F
C	29	FUEL TANK	73.787	DEG.	F
C	30	FUEL OUTLET	91.989	DEG.	F

END SCAN GROUP 1 25 JAN 88 08:45:30

STOPPED SINGLE SCAN 25 JAN 88 08:45:30

BEGIN SCAN GROUP 1 25 JAN 88 08:55:48
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	743.61	DEG.	F
C	2	EXHAUST 2	707.61	DEG.	F
C	3	EXHAUST 3	704.64	DEG.	F
C	4	EXHAUST 4	751.51	DEG.	F
C	5	EXHAUST 5	793.86	DEG.	F
C	6	EXHAUST 6	725.57	DEG.	F
C	7	ENG. COOL. IN	171.87	DEG.	F
C	8	ENG. COOL. OUT	185.73	DEG.	F
C	9	OIL SUMP	191.64	DEG.	F
C	10	OIL GALLERY	193.37	DEG.	F
C	13	ENG. INTAKE	91.275	DEG.	F
C	14	RAD. TOP LEFT	122.82	DEG.	F
C	15	RAD. BTM LEFT	108.79	DEG.	F
C	16	RAD. TOP RIGHT	108.12	DEG.	F
C	17	RAD. BTM RIGHT	90.920	DEG.	F
C	18	GEN. AIR IN	71.865	DEG.	F
C	19	GEN. AIR OUT	86.940	DEG.	F
C	20	GEN. FRAME TOP	84.184	DEG.	F
C	21	GEN. FRAME BTM	78.980	DEG.	F
C	22	GEN. EXCITER	100.37	DEG.	F
C	23	GEN. VOLT. REG.	80.727	DEG.	F
C	24	CONTROL PANEL	84.767	DEG.	F
C	25	RELAY AREA	87.036	DEG.	F
C	26	BATTERY LEFT	109.86	DEG.	F
C	27	BATTERY RIGHT	104.75	DEG.	F
C	28	AIR IN SET	73.852	DEG.	F
C	29	FUEL TANK	74.319	DEG.	F
C	30	FUEL OUTLET	96.097	DEG.	F

END SCAN GROUP 1 25 JAN 88 08:55:58

STOPPED SINGLE SCAN 25 JAN 88 08:55:58

BEGIN SCAN GROUP 1 25 JAN 88 09:05:18
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	742.55	DEG.	F
C	2	EXHAUST 2	707.00	DEG.	F
C	3	EXHAUST 3	710.49	DEG.	F
C	4	EXHAUST 4	756.16	DEG.	F
C	5	EXHAUST 5	794.69	DEG.	F
C	6	EXHAUST 6	726.27	DEG.	F
C	7	ENG. COOL. IN	172.97	DEG.	F
C	8	ENG. COOL. OUT	186.38	DEG.	F
C	9	OIL SUMP	202.77	DEG.	F
C	10	OIL GALLERY	203.70	DEG.	F
C	13	ENG. INTAKE	93.340	DEG.	F
C	14	RAD. TOP LEFT	123.06	DEG.	F
C	15	RAD. BTM LEFT	108.73	DEG.	F
C	16	RAD. TOP RIGHT	108.03	DEG.	F
C	17	RAD. BTM RIGHT	91.034	DEG.	F
C	18	GEN. AIR IN	73.202	DEG.	F
C	19	GEN. AIR OUT	89.616	DEG.	F
C	20	GEN. FRAME TOP	86.722	DEG.	F
C	21	GEN. FRAME BTM	80.820	DEG.	F
C	22	GEN. EXCITER	102.14	DEG.	F
C	23	GEN. VOLT. REG.	83.993	DEG.	F
C	24	CONTROL PANEL	88.220	DEG.	F
C	25	RELAY AREA	87.996	DEG.	F
C	26	BATTERY LEFT	110.69	DEG.	F
C	27	BATTERY RIGHT	105.49	DEG.	F
C	28	AIR IN SET	74.569	DEG.	F
C	29	FUEL TANK	75.320	DEG.	F
C	30	FUEL OUTLET	98.689	DEG.	F

END SCAN GROUP 1 25 JAN 88 09:05:27

STOPPED SINGLE SCAN 25 JAN 88 09:05:27

BEGIN SCAN GROUP 1 25 JAN 88 09:14:57
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	742.26	DEG.	F
C	2	EXHAUST 2	707.00	DEG.	F
C	3	EXHAUST 3	710.38	DEG.	F
C	4	EXHAUST 4	759.38	DEG.	F
C	5	EXHAUST 5	799.73	DEG.	F
C	6	EXHAUST 6	729.34	DEG.	F
C	7	ENG. COOL. IN	173.38	DEG.	F
C	8	ENG. COOL. OUT	186.80	DEG.	F
C	9	OIL SUMP	206.95	DEG.	F
C	10	OIL GALLERY	208.03	DEG.	F
C	13	ENG. INTAKE	94.260	DEG.	F
C	14	RAD. TOP LEFT	123.04	DEG.	F
C	15	RAD. BTM LEFT	108.84	DEG.	F
C	16	RAD. TOP RIGHT	108.26	DEG.	F
C	17	RAD. BTM RIGHT	91.680	DEG.	F
C	18	GEN. AIR IN	74.088	DEG.	F
C	19	GEN. AIR OUT	91.553	DEG.	F
C	20	GEN. FRAME TOP	88.551	DEG.	F
C	21	GEN. FRAME BTM	82.382	DEG.	F
C	22	GEN. EXCITER	103.97	DEG.	F
C	23	GEN. VOLT. REG.	86.212	DEG.	F
C	24	CONTROL PANEL	90.556	DEG.	F
C	25	RELAY AREA	88.908	DEG.	F
C	26	BATTERY LEFT	111.61	DEG.	F
C	27	BATTERY RIGHT	104.50	DEG.	F
C	28	AIR IN SET	75.322	DEG.	F
C	29	FUEL TANK	76.402	DEG.	F
C	30	FUEL OUTLET	101.72	DEG.	F

END SCAN GROUP 1 25 JAN 88 09:15:07

STOPPED SINGLE SCAN 25 JAN 88 09:15:07

BEGIN SCAN GROUP 1 25 JAN 88 09:36:25
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	1024.3	DEG.	F
C	2	EXHAUST 2	1022.9	DEG.	F
C	3	EXHAUST 3	1031.0	DEG.	F
C	4	EXHAUST 4	1058.4	DEG.	F
C	5	EXHAUST 5	1115.2	DEG.	F
C	6	EXHAUST 6	1012.9	DEG.	F
C	7	ENG. COOL. IN	176.96	DEG.	F
C	8	ENG. COOL. OUT	198.63	DEG.	F
C	9	OIL SUMP	210.23	DEG.	F
C	10	OIL GALLERY	211.72	DEG.	F
C	13	ENG. INTAKE	97.042	DEG.	F
C	14	RAD. TOP LEFT	125.11	DEG.	F
C	15	RAD. BTM LEFT	109.72	DEG.	F
C	16	RAD. TOP RIGHT	107.53	DEG.	F
C	17	RAD. BTM RIGHT	93.312	DEG.	F
C	18	GEN. AIR IN	75.314	DEG.	F
C	19	GEN. AIR OUT	95.332	DEG.	F
C	20	GEN. FRAME TOP	98.985	DEG.	F
C	21	GEN. FRAME BTM	83.843	DEG.	F
C	22	GEN. EXCITER	102.44	DEG.	F
C	23	GEN. VOLT. REG.	98.831	DEG.	F
C	24	CONTROL PANEL	94.524	DEG.	F
C	25	RELAY AREA	92.226	DEG.	F
C	26	BATTERY LEFT	108.95	DEG.	F
C	27	BATTERY RIGHT	97.274	DEG.	F
C	28	AIR IN SET	76.530	DEG.	F
C	29	FUEL TANK	79.851	DEG.	F
C	30	FUEL OUTLET	103.04	DEG.	F

END SCAN GROUP 1 25 JAN 88 09:36:35

STOPPED SINGLE SCAN 25 JAN 88 09:36:35

BEGIN SCAN GROUP 1 25 JAN 88 09:49:14
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	1022.8	DEG.	F
C	2	EXHAUST 2	1015.0	DEG.	F
C	3	EXHAUST 3	1022.9	DEG.	F
C	4	EXHAUST 4	1048.6	DEG.	F
C	5	EXHAUST 5	1112.0	DEG.	F
C	6	EXHAUST 6	1009.3	DEG.	F
C	7	ENG. COOL. IN	176.39	DEG.	F
C	8	ENG. COOL. OUT	189.82	DEG.	F
C	9	OIL SUMP	210.37	DEG.	F
C	10	OIL GALLERY	211.04	DEG.	F
C	13	ENG. INTAKE	98.490	DEG.	F
C	14	RAD. TOP LEFT	125.64	DEG.	F
C	15	RAD. BTM LEFT	111.02	DEG.	F
C	16	RAD. TOP RIGHT	108.22	DEG.	F
C	17	RAD. BTM RIGHT	94.438	DEG.	F
C	18	GEN. AIR IN	77.516	DEG.	F
C	19	GEN. AIR OUT	97.764	DEG.	F
C	20	GEN. FRAME TOP	92.874	DEG.	F
C	21	GEN. FRAME BTM	85.106	DEG.	F
C	22	GEN. EXCITER	102.78	DEG.	F
C	23	GEN. VOLT. REG.	92.694	DEG.	F
C	24	CONTROL PANEL	96.559	DEG.	F
C	25	RELAY AREA	94.234	DEG.	F
C	26	BATTERY LEFT	109.09	DEG.	F
C	27	BATTERY RIGHT	97.413	DEG.	F
C	28	AIR IN SET	78.934	DEG.	F
C	29	FUEL TANK	80.526	DEG.	F
C	30	FUEL OUTLET	105.48	DEG.	F

END SCAN GROUP 1 25 JAN 88 09:49:23

STOPPED SINGLE SCAN 25 JAN 88 09:49:23

BEGIN SCAN GROUP 1 25 JAN 88 10:00:22
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	774.61	DEG.	F
C	2	EXHAUST 2	761.90	DEG.	F
C	3	EXHAUST 3	763.40	DEG.	F
C	4	EXHAUST 4	812.11	DEG.	F
C	5	EXHAUST 5	853.38	DEG.	F
C	6	EXHAUST 6	794.77	DEG.	F
C	7	ENG. COOL. IN	171.61	DEG.	F
C	8	ENG. COOL. OUT	183.46	DEG.	F
C	9	OIL SUMP	210.63	DEG.	F
C	10	OIL GALLERY	211.62	DEG.	F
C	13	ENG. INTAKE	98.588	DEG.	F
C	14	RAD. TOP LEFT	123.93	DEG.	F
C	15	RAD. BTM LEFT	109.51	DEG.	F
C	16	RAD. TOP RIGHT	107.67	DEG.	F
C	17	RAD. BTM RIGHT	95.064	DEG.	F
C	18	GEN. AIR IN	77.874	DEG.	F
C	19	GEN. AIR OUT	98.161	DEG.	F
C	20	GEN. FRAME TOP	93.476	DEG.	F
C	21	GEN. FRAME BTM	86.248	DEG.	F
C	22	GEN. EXCITER	101.20	DEG.	F
C	23	GEN. VOLT. REG.	93.879	DEG.	F
C	24	CONTROL PANEL	97.006	DEG.	F
C	25	RELAY AREA	94.408	DEG.	F
C	26	BATTERY LEFT	109.26	DEG.	F
C	27	BATTERY RIGHT	97.559	DEG.	F
C	28	AIR IN SET	78.524	DEG.	F
C	29	FUEL TANK	81.727	DEG.	F
C	30	FUEL OUTLET	105.95	DEG.	F

END SCAN GROUP 1 25 JAN 88 10:00:32

STOPPED SINGLE SCAN 25 JAN 88 10:00:32

TEST DATA

NTS

ITEM 30101.0/12

Serial Set

0

REF. Robert Hollingsworth

MODEL NO. MIL 8058

SERIAL NO. 1205841

REF. NO. MIL-STD 705

SHEET OF

DATE 4 FEB 1968

JOB NO.

PROJ. ENGR.

RECORDER/OBSERVER

National Technical Systems
Scientific Services Group
Testing Division
PO Box 30
Hawthorn, Virginia 22471
Tel: 703 752 5200

FREQUENCY AND VOLTAGE REGISTRATION

STABILITY, AND TRANSIENT RESISTANCE TEST Modified

(SHEET 1181) PREDROP TEST

TAND STEP	MAXIMUM EXTENSION				FREQUENCY				VOLTAGE			
	OVERCUT Hz	Hz	INERSHOOT Z	REC. TIME SEC	(INSTANT JUND) INERSHOOT Hz	REPERATION FREQ Z	VOLT Z	INERSHOOT VOLT Z	MAXIMUM EXTENSION VOLT Z	UNDERSHOOT VOLT Z	REL. TIME SEC	CONSTANT JUND INERSHOOT Z
1	1.71	2.75		.70	.10	2.16	.83	1.91	1.59		.10	.15
2				.78	.12	2.16	.83			1.74	.16	.15
3	1.40	2.66		.78	.07	2.16	.83	2.60	2.17		.20	.15
4				.78	.09	2.16	.83				.16	.15
5	1.74	2.87		.70	.10	2.33	.13	1.74	1.45	1.91	.08	.15
6				.63	.10	2.5	.83			1.56	.08	.15
7	1.67	2.18		.47	.10	2.16	.83	2.08	1.74		.16	.15
8				.86	.12	2.0	.83			1.73	.16	.15
9	1.67	2.72		.70	.07	2.0	.83	2.08	1.74		.12	.15
10				.78	.10	2.16	.83			1.39	.08	.07
11	1.74	2.75		.86	.09	2.16	.83	2.08	1.74		.16	.15
12				.86	.14	2.16	.83				.16	.15
13	1.67	2.55		.86	.10	2.16	.83			1.39	.08	.15
14	1.67	2.72		.31	.10	2.16	.83	2.60	2.17		.16	.15

NOTES:

Free LUNAR Rec since 1960-1 Pre 8000

BEGIN SCAN GROUP 1 25 JAN 88 10:14:55
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	727.20	DEG.	F
C	2	EXHAUST 2	706.01	DEG.	F
C	3	EXHAUST 3	705.56	DEG.	F
C	4	EXHAUST 4	743.79	DEG.	F
C	5	EXHAUST 5	734.88	DEG.	F
C	6	EXHAUST 6	731.69	DEG.	F
C	7	ENG. COOL. IN	171.76	DEG.	F
C	8	ENG. COOL. OUT	183.47	DEG.	F
C	9	OIL SUMP	289.86	DEG.	F
C	10	OIL GALLERY	218.85	DEG.	F
C	13	ENG. INTAKE	98.226	DEG.	F
C	14	RAD. TOP LEFT	123.43	DEG.	F
C	15	RAD. BTTH LEFT	189.32	DEG.	F
C	16	RAD. TOP RIGHT	187.18	DEG.	F
C	17	RAD. BTTH RIGHT	95.377	DEG.	F
C	18	GEN. AIR IN	77.583	DEG.	F
C	19	GEN. AIR OUT	98.426	DEG.	F
C	20	GEN. FRAME TOP	93.478	DEG.	F
C	21	GEN. FRAME BTTH	86.471	DEG.	F
C	22	GEN. EXCITER	184.87	DEG.	F
C	23	GEN. VOLT. REG.	94.835	DEG.	F
C	24	CONTROL PANEL	97.779	DEG.	F
C	25	RELAY AREA	93.999	DEG.	F
C	26	BATTERY LEFT	189.58	DEG.	F
C	27	BATTERY RIGHT	98.259	DEG.	F
C	28	AIR IN SET	88.239	DEG.	F
C	29	FUEL TANK	83.881	DEG.	F
C	30	FUEL OUTLET	185.97	DEG.	F

END SCAN GROUP 1 25 JAN 88 10:15:05

STOPPED SINGLE SCAN 25 JAN 88 10:15:05

BEGIN SCAN GROUP 1 25 JAN 88 10:24:55
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	732.23	DEG.	F
C	2	EXHAUST 2	784.58	DEG.	F
C	3	EXHAUST 3	786.22	DEG.	F
C	4	EXHAUST 4	749.36	DEG.	F
C	5	EXHAUST 5	792.46	DEG.	F
C	6	EXHAUST 6	732.55	DEG.	F
C	7	ENG. COOL. IN	171.62	DEG.	F
C	8	ENG. COOL. OUT	183.66	DEG.	F
C	9	OIL SUMP	288.96	DEG.	F
C	10	OIL GALLERY	289.78	DEG.	F
C	13	ENG. INTAKE	97.855	DEG.	F
C	14	RAD. TOP LEFT	123.43	DEG.	F
C	15	RAD. BTTH LEFT	189.11	DEG.	F
C	16	RAD. TOP RIGHT	187.32	DEG.	F
C	17	RAD. BTTH RIGHT	95.339	DEG.	F
C	18	GEN. AIR IN	77.696	DEG.	F
C	19	GEN. AIR OUT	98.535	DEG.	F
C	20	GEN. FRAME TOP	93.692	DEG.	F
C	21	GEN. FRAME BTTH	87.127	DEG.	F
C	22	GEN. EXCITER	182.69	DEG.	F
C	23	GEN. VOLT. REG.	94.883	DEG.	F
C	24	CONTROL PANEL	97.975	DEG.	F
C	25	RELAY AREA	93.666	DEG.	F
C	26	BATTERY LEFT	189.75	DEG.	F
C	27	BATTERY RIGHT	98.527	DEG.	F
C	28	AIR IN SET	88.188	DEG.	F
C	29	FUEL TANK	83.735	DEG.	F
C	30	FUEL OUTLET	187.53	DEG.	F

END SCAN GROUP 1 25 JAN 88 10:25:05

STOPPED SINGLE SCAN 25 JAN 88 10:25:05

BEGIN SCAN GROUP 1 25 JAN 88 10:35:00
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	730.97	DEG.	F
C	2	EXHAUST 2	784.64	DEG.	F
C	3	EXHAUST 3	787.14	DEG.	F
C	4	EXHAUST 4	749.89	DEG.	F
C	5	EXHAUST 5	793.14	DEG.	F
C	6	EXHAUST 6	731.29	DEG.	F
C	7	ENG. COOL. IN	178.48	DEG.	F
C	8	ENG. COOL. OUT	183.12	DEG.	F
C	9	OIL SUMP	288.59	DEG.	F
C	10	OIL GALLERY	289.38	DEG.	F
C	13	ENG. INTAKE	96.833	DEG.	F
C	14	RAD. TOP LEFT	121.48	DEG.	F
C	15	RAD. BTTH LEFT	187.72	DEG.	F
C	16	RAD. TOP RIGHT	185.13	DEG.	F
C	17	RAD. BTTH RIGHT	93.484	DEG.	F
C	18	GEN. AIR IN	78.261	DEG.	F
C	19	GEN. AIR OUT	95.178	DEG.	F
C	20	GEN. FRAME TOP	91.481	DEG.	F
C	21	GEN. FRAME BTTH	85.743	DEG.	F
C	22	GEN. EXCITER	182.71	DEG.	F
C	23	GEN. VOLT. REG.	94.341	DEG.	F
C	24	CONTROL PANEL	97.348	DEG.	F
C	25	RELAY AREA	98.547	DEG.	F
C	26	BATTERY LEFT	189.86	DEG.	F
C	27	BATTERY RIGHT	98.647	DEG.	F
C	28	AIR IN SET	72.596	DEG.	F
C	29	FUEL TANK	84.868	DEG.	F
C	30	FUEL OUTLET	186.35	DEG.	F

END SCAN GROUP 1 25 JAN 88 10:35:00

STOPPED SINGLE SCAN 25 JAN 88 10:35:00

BEGIN SCAN GROUP 1 25 JAN 88 10:45:00
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	734.68	DEG.	F
C	2	EXHAUST 2	783.91	DEG.	F
C	3	EXHAUST 3	787.93	DEG.	F
C	4	EXHAUST 4	749.13	DEG.	F
C	5	EXHAUST 5	793.53	DEG.	F
C	6	EXHAUST 6	738.34	DEG.	F
C	7	ENG. COOL. IN	171.99	DEG.	F
C	8	ENG. COOL. OUT	184.55	DEG.	F
C	9	OIL SUMP	288.78	DEG.	F
C	10	OIL GALLERY	289.65	DEG.	F
C	13	ENG. INTAKE	97.346	DEG.	F
C	14	RAD. TOP LEFT	123.22	DEG.	F
C	15	RAD. BTTH LEFT	189.69	DEG.	F
C	16	RAD. TOP RIGHT	188.22	DEG.	F
C	17	RAD. BTTH RIGHT	94.495	DEG.	F
C	18	GEN. AIR IN	77.374	DEG.	F
C	19	GEN. AIR OUT	97.467	DEG.	F
C	20	GEN. FRAME TOP	93.867	DEG.	F
C	21	GEN. FRAME BTTH	86.422	DEG.	F
C	22	GEN. EXCITER	184.93	DEG.	F
C	23	GEN. VOLT. REG.	94.884	DEG.	F
C	24	CONTROL PANEL	97.285	DEG.	F
C	25	RELAY AREA	92.712	DEG.	F
C	26	BATTERY LEFT	111.29	DEG.	F
C	27	BATTERY RIGHT	188.58	DEG.	F
C	28	AIR IN SET	79.572	DEG.	F
C	29	FUEL TANK	84.157	DEG.	F
C	30	FUEL OUTLET	185.90	DEG.	F

END SCAN GROUP 1 25 JAN 88 10:45:00

STOPPED SINGLE SCAN 25 JAN 88 10:45:00

TEST DATA

ITEM 30KW 60 Hz

GENERATOR SET

MANUFACTURED

MEGR. JOHN R. HOLLINGSWORTH

MODEL NO. MEF 005A

SERIAL NO. 1520584

REF. NO. MIL STD 705

SHEET 1 OF 1

DATE 3 FEB 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER

National Scientific Testing Division

Technical Services P.O. Box 30

Systems Group Hanwood, Virginia 22471

FREQUENCY AND VOLTAGE REGULATION, Tel: 703 752 5300

STABILITY, AND TRANSIENT RESPONSE TEST

(SHEET 1 OF 1) POST LOAD TEST

LOAD STEP	MAXIMUM EXCURSION				FREQUENCY		CONSTANT LOAD				REGULATION				MAXIMUM EXCURSION				VOLTAGE				CONSTANT LOAD			
	OVERCUT Hz	UNDERCUT Hz	TIME SEC	± Hz	± Hz	± Hz	FREQ. Hz	VOLT	IMPERV. VOLT	IMPERV. VOLT	VOLT	IMPERV. VOLT	IMPERV. VOLT	SEC	VOLT	IMPERV. VOLT	VOLT	IMPERV. VOLT	IMPERV. VOLT	VOLT	IMPERV. VOLT	IMPERV. VOLT	SEC	VOLT	IMPERV. VOLT	
1	1.27	2.55	.70	.09	.15	.09	1.83	.83	2.95	2.46				.15	.17	.15							.15	.17	.15	
2			.70	.09	.15	.09	2.0	.83			2.08	1.74		.23	.17	.15							.15	.17	.15	
3	1.24	2.89	.47	.10	.12	.10	2.0	.83	2.60	2.17				.15	.17	.15							.15	.17	.15	
4			.78	.09	.15	.09	1.66	.83			1.39	1.16		.15	.17	.15							.15	.17	.15	
5	1.70	2.83	.39	.10	.17	.10	1.83	.83	2.26	1.88				.15	.17	.15							.15	.17	.15	
6			.86	.10	.17	.10	2.0	.83			1.74	1.45		.15	.17	.15							.15	.17	.15	
7	1.63	2.22	.55	.09	.15	.09	1.83	.83	2.26	1.88				.15	.17	.15							.15	.17	.15	
8			.96	.09	.15	.09	1.83	.83			1.91	1.59		.15	.17	.15							.15	.17	.15	
9	1.27	2.55	.63	.12	.20	.12	2.0	.83	2.26	1.88				.15	.17	.15							.15	.17	.15	
10			.78	.12	.20	.12	2.16	.83			1.56	1.30		.15	.17	.15							.15	.17	.15	
11	1.67	2.78	.31	.09	.15	.09	2.16	.83	1.91	1.59				.08	.17	.15							.15	.17	.15	
12			.78	.09	.15	.09	2.16	.83			1.74	1.45		.15	.17	.15							.15	.17	.15	
13	1.67	2.78	.39	.09	.15	.09	2.0	.83	1.74	1.45				.15	.17	.15							.15	.17	.15	
14																										

NOTES:

FREQ 400000 STABILITY SWEEP FROM Post Drop (C.P.)

BEGIN SCAN GROUP 1 25 JAN 88 15:16:05
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	95.758	DEG.	F
C	2	EXHAUST 2	94.834	DEG.	F
C	3	EXHAUST 3	93.038	DEG.	F
C	4	EXHAUST 4	94.581	DEG.	F
C	5	EXHAUST 5	94.581	DEG.	F
C	6	EXHAUST 6	93.167	DEG.	F
C	7	ENG. COOL. IN	76.887	DEG.	F
C	8	ENG. COOL. OUT	96.224	DEG.	F
C	9	OIL SUMP	89.211	DEG.	F
C	10	OIL GALLERY	86.414	DEG.	F
C	13	ENG. INTAKE	90.529	DEG.	F
C	14	RAD. TOP LEFT	88.269	DEG.	F
C	15	RAD. BTM LEFT	72.551	DEG.	F
C	16	RAD. TOP RIGHT	81.562	DEG.	F
C	17	RAD. BTM RIGHT	60.823	DEG.	F
C	18	GEN. AIR IN	63.834	DEG.	F
C	19	GEN. AIR OUT	63.889	DEG.	F
C	20	GEN. FRAME TOP	83.738	DEG.	F
C	21	GEN. FRAME BTM	67.414	DEG.	F
C	22	GEN. EXCITER	73.128	DEG.	F
C	23	GEN. VOLT. REG.		OPEN TC	
C	24	CONTROL PANEL		OPEN TC	
C	25	RELAY AREA		OPEN TC	
C	26	BATTERY LEFT	70.560	DEG.	F
C	27	BATTERY RIGHT	70.348	DEG.	F
C	28	AIR IN SET		OPEN TC	
C	29	FUEL TANK	59.465	DEG.	F
C	30	FUEL OUTLET	74.319	DEG.	F

END SCAN GROUP 1 25 JAN 88 15:16:15

STOPPED SINGLE SCAN 25 JAN 88 15:16:15

BEGIN SCAN GROUP 1 25 JAN 88 15:16:51
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	95.448	DEG.	F
C	2	EXHAUST 2	95.524	DEG.	F
C	3	EXHAUST 3	93.062	DEG.	F
C	4	EXHAUST 4	94.266	DEG.	F
C	5	EXHAUST 5	94.626	DEG.	F
C	6	EXHAUST 6	93.083	DEG.	F
C	7	ENG. COOL. IN	76.857	DEG.	F
C	8	ENG. COOL. OUT	98.147	DEG.	F
C	9	OIL SUMP	89.208	DEG.	F
C	10	OIL GALLERY	86.411	DEG.	F
C	13	ENG. INTAKE	90.499	DEG.	F
C	14	RAD. TOP LEFT	88.266	DEG.	F
C	15	RAD. BTM LEFT	72.829	DEG.	F
C	16	RAD. TOP RIGHT	81.660	DEG.	F
C	17	RAD. BTM RIGHT	60.951	DEG.	F
C	18	GEN. AIR IN	64.405	DEG.	F
C	19	GEN. AIR OUT	64.017	DEG.	F
C	20	GEN. FRAME TOP	83.722	DEG.	F
C	21	GEN. FRAME BTM	67.577	DEG.	F
C	22	GEN. EXCITER	73.234	DEG.	F
C	23	GEN. VOLT. REG.	71.347	DEG.	F
C	24	CONTROL PANEL	68.673	DEG.	F
C	25	RELAY AREA	76.947	DEG.	F
C	26	BATTERY LEFT	70.668	DEG.	F
C	27	BATTERY RIGHT	70.435	DEG.	F
C	28	AIR IN SET	72.638	DEG.	F
C	29	FUEL TANK	59.498	DEG.	F
C	30	FUEL OUTLET	74.418	DEG.	F

END SCAN GROUP 1 25 JAN 88 15:17:01

STOPPED SINGLE SCAN 25 JAN 88 15:17:01

BEGIN SCAN GROUP 1 25 JAN 88 15:19:55
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	671.37	DEG.	F
C	2	EXHAUST 2	633.95	DEG.	F
C	3	EXHAUST 3	629.96	DEG.	F
C	4	EXHAUST 4	643.72	DEG.	F
C	5	EXHAUST 5	701.89	DEG.	F
C	6	EXHAUST 6	594.36	DEG.	F
C	7	ENG. COOL. IN	78.134	DEG.	F
C	8	ENG. COOL. OUT	114.14	DEG.	F
C	9	OIL SUMP	106.64	DEG.	F
C	10	OIL GALLERY	112.11	DEG.	F
C	13	ENG. INTAKE	79.189	DEG.	F
C	14	RAD. TOP LEFT	89.453	DEG.	F
C	15	RAD. BTM LEFT	88.564	DEG.	F
C	16	RAD. TOP RIGHT	89.123	DEG.	F
C	17	RAD. BTM RIGHT	75.454	DEG.	F
C	18	GEN. AIR IN	73.236	DEG.	F
C	19	GEN. AIR OUT	61.344	DEG.	F
C	20	GEN. FRAME TOP	81.436	DEG.	F
C	21	GEN. FRAME BTM	71.029	DEG.	F
C	22	GEN. EXCITER	74.881	DEG.	F
C	23	GEN. VOLT. REG.	71.284	DEG.	F
C	24	CONTROL PANEL	68.925	DEG.	F
C	25	RELAY AREA	76.507	DEG.	F
C	26	BATTERY LEFT	74.984	DEG.	F
C	27	BATTERY RIGHT	73.410	DEG.	F
C	28	AIR IN SET	70.198	DEG.	F
C	29	FUEL TANK	60.699	DEG.	F
C	30	FUEL OUTLET	75.311	DEG.	F

END SCAN GROUP 1 25 JAN 88 15:20:05

STOPPED SINGLE SCAN 25 JAN 88 15:20:05

BEGIN SCAN GROUP 1 25 JAN 88 15:29:53
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	728.06	DEG.	F
C	2	EXHAUST 2	718.33	DEG.	F
C	3	EXHAUST 3	716.70	DEG.	F
C	4	EXHAUST 4	742.07	DEG.	F
C	5	EXHAUST 5	784.04	DEG.	F
C	6	EXHAUST 6	717.65	DEG.	F
C	7	ENG. COOL. IN	160.00	DEG.	F
C	8	ENG. COOL. OUT	182.03	DEG.	F
C	9	OIL SUMP	173.44	DEG.	F
C	10	OIL GALLERY	175.08	DEG.	F
C	13	ENG. INTAKE	88.598	DEG.	F
C	14	RAD. TOP LEFT	121.24	DEG.	F
C	15	RAD. BTM LEFT	108.20	DEG.	F
C	16	RAD. TOP RIGHT	109.62	DEG.	F
C	17	RAD. BTM RIGHT	94.344	DEG.	F
C	18	GEN. AIR IN	68.295	DEG.	F
C	19	GEN. AIR OUT	84.934	DEG.	F
C	20	GEN. FRAME TOP	82.473	DEG.	F
C	21	GEN. FRAME BTM	75.824	DEG.	F
C	22	GEN. EXCITER	84.470	DEG.	F
C	23	GEN. VOLT. REG.	75.100	DEG.	F
C	24	CONTROL PANEL	76.336	DEG.	F
C	25	RELAY AREA	63.651	DEG.	F
C	26	BATTERY LEFT	107.22	DEG.	F
C	27	BATTERY RIGHT	96.458	DEG.	F
C	28	AIR IN SET	69.950	DEG.	F
C	29	FUEL TANK	70.418	DEG.	F
C	30	FUEL OUTLET	93.911	DEG.	F

END SCAN GROUP 1 25 JAN 88 15:30:03

STOPPED SINGLE SCAN 25 JAN 88 15:30:03

BEGIN SCAN GROUP 1 25 JAN 88 15:48:00
30 KW 60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	725.63	DEG.	F
C	2	EXHAUST 2	708.84	DEG.	F
C	3	EXHAUST 3	711.56	DEG.	F
C	4	EXHAUST 4	743.84	DEG.	F
C	5	EXHAUST 5	783.74	DEG.	F
C	6	EXHAUST 6	716.28	DEG.	F
C	7	ENG. COOL. IN	171.81	DEG.	F
C	8	ENG. COOL. OUT	185.41	DEG.	F
C	9	OIL SUMP	195.72	DEG.	F
C	10	OIL GALLERY	197.22	DEG.	F
C	13	ENG. INTAKE	91.861	DEG.	F
C	14	RAD. TOP LEFT	124.86	DEG.	F
C	15	RAD. BTM LEFT	111.84	DEG.	F
C	16	RAD. TOP RIGHT	111.68	DEG.	F
C	17	RAD. BTM RIGHT	94.753	DEG.	F
C	18	GEN. AIR IN	68.869	DEG.	F
C	19	GEN. AIR OUT	87.386	DEG.	F
C	20	GEN. FRAME TOP	84.238	DEG.	F
C	21	GEN. FRAME BTM	77.388	DEG.	F
C	22	GEN. EXCITER	87.958	DEG.	F
C	23	GEN. VOLT. REG.	88.885	DEG.	F
C	24	CONTROL PANEL	83.831	DEG.	F
C	25	RELAY AREA	86.756	DEG.	F
C	26	BATTERY LEFT	112.58	DEG.	F
C	27	BATTERY RIGHT	188.98	DEG.	F
C	28	AIR IN SET	72.481	DEG.	F
C	29	FUEL TANK	78.723	DEG.	F
C	30	FUEL OUTLET	97.221	DEG.	F

END SCAN GROUP 1 25 JAN 88 15:48:18

STOPPED SINGLE SCAN 25 JAN 88 15:48:18

BEGIN SCAN GROUP 1 25 JAN 88 15:49:52
30 KW/60 HZ GEN SET S/N K20 5841

C	1	EXHAUST 1	738.93	DEG.	F
C	2	EXHAUST 2	706.25	DEG.	F
C	3	EXHAUST 3	709.92	DEG.	F
C	4	EXHAUST 4	745.92	DEG.	F
C	5	EXHAUST 5	787.18	DEG.	F
C	6	EXHAUST 6	721.17	DEG.	F
C	7	ENG. COOL. IN	172.27	DEG.	F
C	8	ENG. COOL. OUT	185.87	DEG.	F
C	9	OIL SUMP	204.38	DEG.	F
C	10	OIL GALLERY	205.19	DEG.	F
C	13	ENG. INTAKE	92.181	DEG.	F
C	14	RAD. TOP LEFT	124.68	DEG.	F
C	15	RAD. BTM LEFT	111.17	DEG.	F
C	16	RAD. TOP RIGHT	111.24	DEG.	F
C	17	RAD. BTM RIGHT	92.938	DEG.	F
C	18	GEN. AIR IN	69.549	DEG.	F
C	19	GEN. AIR OUT	89.345	DEG.	F
C	20	GEN. FRAME TOP	85.932	DEG.	F
C	21	GEN. FRAME BTM	78.846	DEG.	F
C	22	GEN. EXCITER	89.411	DEG.	F
C	23	GEN. VOLT. REG.	83.686	DEG.	F
C	24	CONTROL PANEL	87.484	DEG.	F
C	25	RELAY AREA	88.198	DEG.	F
C	26	BATTERY LEFT	113.95	DEG.	F
C	27	BATTERY RIGHT	182.37	DEG.	F
C	28	AIR IN SET	72.115	DEG.	F
C	29	FUEL TANK	72.321	DEG.	F
C	30	FUEL OUTLET	99.232	DEG.	F

END SCAN GROUP 1 25 JAN 88 15:50:01

STOPPED SINGLE SCAN 25 JAN 88 15:50:02

Gen Set 30 kW 60 Hz

S/N R253774

HIGH TEMPERATURE TEST (710.1c)

Regulator Range (511.1)	✓
Frequency Adj. Range (511.2)	*
Circuit Interrupter (Short Circuit) (512.1)	✓
Circuit Interrupter (Overload Trip) (512.2)	*
Circuit Interrupter (512.3) (Overvoltage/Undervoltage)	✓
Indicating Instrument (513.2)	*
Freq. and Voltage Regulation Stab. & Trans Response (608.1)	*
Freq. and Voltage Stability (Long Term) (608.2)	*
Voltage Dip & Rise (619.2)	✓
DC Control (655.1)	*
Winding Resistance (401.1a)	✓
710.1.3.2h HIGH TEMP START	✓

BASELINE TESTS

SOUND LEVEL MIL STD 1474	N/A
FREQUENCY AND VOLTAGE REG. (608.1)	N/A

AMBIENT TESTS (Cont.)

FREQUENCY AND VOLTAGE REG. PRE DROP (614.1)	*
FREQUENCY AND VOLTAGE REG. POST DROP (614.1)	*

AMBIENT TEMPERATURE TESTS

Winding Resistance (401.1a)	✓
MIL-STD-1474 Sound Level	✓
Drop Test <i>STRUCTURAL DAMAGE!</i> (740.3b)	*
Max Power (640.1)	*
Overtemperature Protective Device (815.2)	*

* FAILED TEST

30 kW, 60 Hz
S/N RZ 53774

1145 19 October 1987
Rec'd motor unit from
VSE B

SET UNIT UP FOR SOUND
LEVEL TEST
FUELED UNIT
CHECK OIL - OK
CHECKED WATER - COOLANT
15 MILKY GARY/GREASE WITH
EVIDENCE OF OIL ON RADIATOR
CAP AND FILLER NECK - ALSO
APPEARS TO BE OIL IN
COOLANT.

1548-1608 PERFORMED SOUND LEVEL TEST
ON 33.7 - 34.0

20 October 1987
DEAERED RADIATOR AND TOOK
SAMPLES OF COOLANT

REFILLED RADIATOR AND WATER
RAN UNIT TO FLUSH SYSTEM
DRAINED & TOOK SAMPLE -
STILL LOOKS CLOUDY & SOME
SOLID BLACK PARTICULATE
REFILLED RADIATOR WITH WATER
AND RAN UNIT TO FLUSH AGAIN
DRAINED RADIATOR & TOOK SAMPLE
STILL CLOUDY BUT BETTER
REFILLED & FLUSHED AGAIN
REFILLED w/ 50/50 SOLUTION WITH RIBBON
INSTALLED UNIT IN HIGH
TEMP CHAMBER



ACCOUNT BOOK 17 1/2 IN x 8 1/2 IN.

17 1/2 PAGES	200 PAGES	500 PAGES	1000 PAGES
100-100-1 100-100-2 100-100-3 100-100-4 100-100-5	100-100-1 100-100-2 100-100-3 100-100-4 100-100-5	100-100-1 100-100-2 100-100-3 100-100-4 100-100-5	100-100-1 100-100-2 100-100-3 100-100-4 100-100-5

BOORUM & PEASE CO. ELIZABETH NJ 07208 USA

21 OCTOBER 1987

Hooked up INSTRUMENTATION
INSTALLED ADDITIONAL BATTLE
ABOVE CONTROL PANEL AS PER
FRANK PIERCE-VSE. ABLES DID NOT
LINE UP PROPERLY - WAS RECALLED
BY VSE TECHNICIAN *[Signature]*

DISCUSSED LARGE AMOUNT OF
WHAT APPEARS TO BE OIL
ON THE LIGHT Sides OF EXTENSIVE
EXTENSIVE FROM CENTER OF EXTENSIVE
MOUNTED ALONG THE SIDE FROM
INTERIOR AREA *[Signature]*

1730

~~SE~~ STARTED AMBIENT SENSITIVE
FOR AMBIENT AMBIENT RESISTANCE
TEST. *[Signature]*

22 OCTOBER 1987

REMOVED BATTERIES FROM ABOVE
CONTROL PANEL AS PER LIGHT ANALYSIS
VSE. TWO (2) LIT-MINUTE SENSITIVE
DURING REMOVAL *[Signature]*

0904

23 OCTOBER 1987

RETURNED AMBIENT WINDING
RESISTANCE *[Signature]*

1146

24 OCTOBER 1987
~~REMOVED~~ STABILIZED & REINSTALLED
HIGHT TEMP. WINDING RESISTANCE
ATTEMPTED TO RESTART UNIT

1241

AFTER WINDING RESISTANCE -
WAS NOT CONTINUING TO RESTART -
COULDN'T OVERTEMP FI LIGHT and
ALLOW TO COOL *[Signature]*

24 OCT 1987

1244 STARTED UNIT TO STABILIZE
FOR High Temp 710.1 (H) 125
30 Cal 642

1245	C9				
	C10	227			
	C30	137			
	C9 C10 On Cam				
1245	98	137	220	231	126
1245	98	138	223	234	128
1325	99	139	225	236	
1330	SHUT DOWN	low air flow Temp. low. Cont.			
1359	TRANSFERRED AIR INAKE	Barrel Assy 27, km			
1366	Reconnect Unit	Barrel Assy 27, km			
1405		142	209		128
1415		141	219		128
1425		139	223		130
1435		138	223		130
1445		136	223		129
1448	SHUT DOWN UNIT				128
1448	Arrapt Center	2 1/2 hours			
1448	Down on Dec Temp.				

25 OCT 87

Reverse Unit in Chamber

Intake Facing Towards Chamber
Constraining Fans; Unit Located
in Center of Chamber
Remove Baffle on Intake Radiator Cover Plate
10:22 Change Complete Start Fans w/
Chamber Hot Temp.

1100 Start Unit for 6081
1133 Unit Shut Down - Over Temp
Notes Radiation Cap Had
Releives - Coolant Pressure
on Chamber Floor.

Remove Cover Plate Reinstall Intake Set
Baffle Assy

1153 Reverse Unit for 6081
1208 Unit Shut Down Over Temp

26 Oct 1987
0758 Started Chamber for
1250 F

1100 Started unit - operating at
no load to check out overheat
problem - ~~500~~ attempting
to stabilize coolant temp
Blocked baffle as per
C. Ample

1214
1300 Turned unit off
1420 Refueled unit
1423 Restarted unit no load baffle blocked
1450 Shut unit down

26 OCT 87

1117 Started unit baffle not blocked
1200 Shut down unit
1234 Started unit

1335 Applied full load to GEM
1407 Unit shut down due to over temp
1408 Started unit in battle smart to cool
down then apply 1/4 load as soon as
unit stabilizes

1420 Took unit out of battle smart
1430 Applied 1/4 load to unit
1445 Applied 1/2 load to unit
1515 Took load off unit
1537 Applied 1/2 load to unit
1543 Took load off unit
1633 Applied 1/2 load to unit
1705 Change to 3/4 load
1833 Installed plate in front of baffle
to block intake air

2149 Turned unit off
29 October 1987

Find Place - has access into quench
without system from multiten 7 -
Circuit with insulation blanket,
aluminum 15.6 wire shield a aluminum
tape to secure foil.

1103 Strong chamber
1130 Started unit
1738 Unit on full load
1809 Unit shut down due to over temp on
full load
1210 Started unit on battle smart needed
chamber temp from 125.2 to 120.2
1233 Took unit out of battle smart
1248 Going to apply rated load
1420 Unit stabilized at 120.2 dropping
chamber to 115.2

29 OCT 87

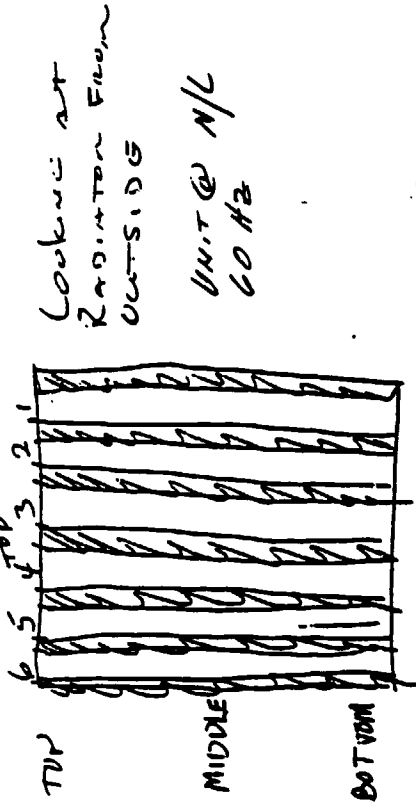
1518 SHUT UNIT DOWN
 1535 STARTED UNIT WITHOUT
 EXHAUST EXTENDER - PLACED
 ON TAIL LAMP TO CHECK
 EXHAUST PRESSURE -
 GALT. PRESS 58.0" H₂O and
 CLIMB -
 1537 SHUT UNIT DOWN

30 OCT 87

821 STARTED UNIT ON NO LOAD
 830 PLACED UNIT ON FULL RATED LOAD AT 120°F
 920 SHUT UNIT DOWN AS PER VSE
 1009 REMOVED FAN AND SHROUD FROM RIGHT HAND
 AS PER VSE. BOTH FAN AND RMR SHROUD HAD
 A HEAVY OIL DEPOSITS ON THEM ALSO RMR
 ITSELF HAD A FILM OF OIL ON IT
 1145 INSTALLED NEW FAN AND SHROUD WIRE TO PUT
 FAN GUARDS BACK AROUND FAN BELT AND OF
 DESIGN OF NEW SHROUD
 ENGINE OIL 2 1/2 QUARTS LOW ABOVE 20 QUART
 ONE PARTICLES FOUND IN MONITOR FLUSHED
 ONCE BEFORE FOR SAME PROBLEM
 1309 STARTED GENERATOR FULL RATED LOAD AT
 125°F BATTLE OPEN NEW FAN AND SHROUD
 INSTALLED
 1326 UNIT SHUT DOWN DUE TO OVERTEMP
 1350 STARTED UNIT IN BATTLE SHUT TO COOL
 IT DOWN CHAMBER AT 120°F
 1400 TOOK UNIT OUT OF BATTLE SHUT
 MAINTENANCE CUT PUT ON FAN

8-115

30 October 1987



LOOKING AT
 RADIATION FROM
 OUTSIDE
 UNIT @ N/C
 60 H₂

	NO LOAD			120°F AMB		
	6	5	4	6	5	4
TOP	900	1200	1380	920	710	470 FT/min
MIDDLE	1370	1130	820	730	1140	1300
BOTTOM	1340	1320	1250	1460	1630	1170

RATED LOAD 120°F AMB

	6	5	4	3	2	1
TOP	930	1310	1320	990	770	470-570 ft/min
MIDDLE	1400	1110	870	690	1080	1380
BOTTOM	1160	1220	1260	1480	1640	1150

1414 APPLICATION RATED LOAD
 1421 UNIT SHUT DOWN
 1430 FAN AT 30° RATED LOAD TO 140.
 1431 UNIT SHUT DOWN

2 November 1987

9829 START UNIT NO LOAD TO 120°F AMB OUT OF
 CHAMBER

	NO LOAD			120°F AMB		
	6	5	4	3	2	1
TOP	40	150	70	920	20	50 FT/min
MIDDLE	390	60	690	590	90	260
BOTTOM	1890	1510	2540	2100	1770	930

RATED LOAD

	6	5	4	3	2	1
TOP	1990	2980	2630	2190	2170	1380 1901 AM
MIDDLE	2690	2170	1470	1650	2410	2050 FT/min
BOTTOM	2490	2940	2730	2930	2770	2610

NOVEMBER 2 1987

0938 APPLIED RATED LOAD TO UNIT
 0940 ASSESSED CHANGE FOR 125°F
 0948 UNIT SHUT DOWN DUE TO OVER TEMP AT 125°F
 REMOVED LOWER Baffle @ CENTRAL FAN
 UPPER Baffle OPEN
 RESTARTED UNIT @ 1/2
 0950 RESTARTED UNIT @ 1/2
 1000 RESTARTED UNIT @ 1/2
 1033 UNIT SHUT SELF DOWN - OVER TEMP

	6	5	4	3	2	1	REMARKS
TOP	310	370	370	2570	2570	1100	1st FAN
MIDDLE	250	2570	2000	1900	2120	5140	2nd FAN
BOTTOM	2350	2570	2000	2000	3000	2140	3rd FAN

REMOVED RAD. ATOM. Baffle

REMOVED RESTARTED UNIT @ 1/2 Baffle SHUT 12

CAL DOWN

REMOVED Baffle SHUT - UNIT @ 1/2

BLACKED TOP AFT Baffle

SHUT UNIT DOWN

	6	5	4	3	2	1	REMARKS
TOP	370	370	370	270	370	380	REMOVED Baffle SHUT
MIDDLE	370	370	270	270	1000	270	
BOTTOM	1170	1900	1900	270	270	130	

REINSTALLED AFT LOWER Baffle

AFT UPPER Baffle BLOCK

SHUT UNIT @ 1/2

	6	5	4	3	2	1
TOP	1300	370	370	170	100	470
MIDDLE	1800	370	370	370	170	370
BOTTOM	1900	370	170	270	370	180

0948 AFT TOP Baffle

SHUT UNIT DOWN

3 November 1987

REMOVED REINSTALLED FAN & SHUT
 REINSTALLED RESTART FAN & SHUT
 CONFIRMED 13 NOV

RESTART FAN

RESTART SHUT

RESTART SHUT Baffle SHUT

LOWER AFT Baffle OPEN

UPPER AFT Baffle OPEN

REMOVED Baffle SHUT

SHUT UNIT @ 1/2

RESTART UNIT @ 1/2

RESTARTED AFT FAN

6 5 4 3 2 1

TOP 370 370 370 370 370 370

MIDDLE 370 370 370 370 370 370

BOTTOM 1100 1900 1900 1900 1900 1900

REMOVED AFT TOP Baffle

SHUT UNIT DOWN - REINSTALLED Baffle

REMOVED TOP AFT Baffle

SHUT UNIT @ 1/2 Baffle SHUT 12

REMOVED Baffle SHUT UNIT RUNNING @ 1/2

RESTART UNIT @ 1/2

6 5 4 3 2 1

TOP 370 370 370 370 370 370

REMOVED CENTER SECTION FROM DISCHARGE Baffle

MIDDLE 370 370 370 370 370 370

BOTTOM 370 370 370 370 370 370

12/12 UNIT SHUT DOWN 1/2

REMOVED CENTER SECTION FROM DISCHARGE Baffle

1525 STARTED UNIT @ 1/2

3 Nov 1987

6 5 4 3 2 1
 1110 210 210 150 150 110
 11100 220 220 150 170 100 210
 Bottom 104 230 170 200 320 250

1635 SHUT UNIT DOWN

4 Nov 1987

2800 REVISIONS (BATCH 3000) OF DROPPED BATTERIES
 2917 CHECKED ON ADDITIONAL UNIT.
 3000 STARTED UNIT PLACED ON 2/1.
 CHECKING IN BATTLE SHEET AS FOR BATTLES
 USE.

2917 REMOVE LOAD FROM UNIT RUNNING ON ALL
 IN BATTLE SHEET.

1142 SHUT UNIT DOWN TO PREPARE FOR
 STARTING HIGH TEMP TESTS
 1330 STARTED UNIT. STABILIZED FOR 511.2
 FILES. ADJUST, HIGH TEMP.
 1455 SHUT UNIT DOWN. ADJUSTED TEST
 CALIBRATION OUT TEMP 89.9F

5 Nov 1987

0900 CHANGING CRANKSHAFT PULLEY BACK TO ORIGINAL
 PULLEY

GOING TO CHECK SOUND LEVEL BY PULLING
 INCHON BATTERIES OUT AND DRIVING A COMPLETE
 SOUND TEST TO DETERMINE CHANGE DUE TO DIFFERENT
 PLACED OPENINGS IN THE AFT BATTERY SECTION

1130 FUEL LEAK IN RETURN LINE ABOVE INJECTOR PUMP
 1700 COMPLETED SOUND TEST AND PLACED GEM SET
 IN CARRIER TO STABILIZE AT AMBIENT TEMP
 FOR WINDOW RESISTANCE TEST

6 Nov. 87

1447 STARTED UNIT TO STABILIZE TOP LEFT BATTLE OPEN
 1453 PLACED UNIT ON 2/1 TO STABILIZE UNIT
 FOR HIGH RESISTANCE WINDOW TEST
 1555 SHUT UNIT DOWN FOR HIGH WINDOW
 RESISTANCE TEST.

9 NOV. 87

0939 STARTED UNIT TO STABILIZE AT 135°F
 TOP LEFT BATTERIES BLOCKED FOR
 SHEET TEST 608.1

1005 SHUT UNIT DOWN TO REPAIR UNIT RINGS
 1010 (CONTINUED) UNIT

1030 APPLIED RATED LOAD STARTED STABILIZATION FOR
 710.1, 3.2 (F) (2) METHOD 511.1 REGULATING RANGE
 TEST

1052 ADJUSTED LOAD

1127 UNIT SHUT DOWN ON OVERTEMP WITH BATTLE
 CONTINUE ADDITIONAL) BLOCKED ON FULL RATED
 LOAD

1130 STARTED UNIT IN BATTLE SHUT WITH BATTLE
 OPEN AND LOAD OVER TEMP INDICATOR NO LOWER
 WICKS

1138 REMOVED FROM BATTLE SHUT PLACED ON
 RATED LOAD

1247 SHUT UNIT DOWN ON COMPLETED TEST

1241 STARTED UNIT UP NO LOAD

1315 APPLIED RATED LOAD IN ORDER TO STABILIZE
 FOR 710.1, 3.2 (F) (2) METHOD 511.2 FREQUENCY
 ADJUST

1406 END OF TEST

1400 STARTED STABILIZATION FOR HIGH TEMP OPERATION
 710.1, 3.2 (H)

1441 SHUT UNIT DOWN FOR 5 MINUTES

1447 TAIED TO START UNIT 2 AND 3 TIMES NO RUN
 STARTED UNIT IN BATTLE SHUT NO LOAD

9 NOV 87

1443 TO STABILIZE UNIT
1444 UNIT DOWN TO ADJUST GAGES TO ZERO
FOR INDICATING TEST 710.1.3.2 (H) 6

METHOD 513.2 INDICATING INSTRUMENT TEST
1535 STARTED UNIT TO DO TEST 710.1.3.2 (H) 6

METHOD 513.2

1543 SHUT UNIT DOWN EQUIPMENT MALFUNCTION

~~UNIT STARTED UNIT DOWN EQUIPMENT MALFUNCTION~~

10 NOV. 87

0610 ADDED 1 QUART OF OIL TO GEN. SET ALSO TAPPED
OFF RIGHT-TO

0630 STARTED UNIT TO STABILIZE FOR 710.1.3.2 (H) (S)

METHOD 604.2 LONG TERM AT 125°F

0635 APPLIED RATED LOAD FOR STABILIZATION

1212 REMOVED LOAD TO START STABILIZATION

1253 PERFORMED SHORT TERM STABILITY

1255 START LONG TERM STABILITY AT NO LOAD

1255 END OF LONG TERM STABILITY

1255 END OF TEST

1260 SHUT UNIT DOWN.

11 NOV 87

TEST 710.1.3.2 (F) (6) METHOD 513.2 ADJUSTING
INSTRUMENT TEST (ELECTRONIC)

1054 START UNIT NO LOAD

1155 SHUT UNIT DOWN

1315 START UNIT TO STABILIZE FOR 710.1.3.2 (H) (7)

MEANS (WELLS)

1440 STARTED SHORT TERM WOB.1

1537 END OF TEST

14 NOV 87

1049 STARTED UNIT NO LOAD FOR 710.1.3.2 (F)
(3) CIRCUIT INTERRUPTER FOR SHORT CIRCUIT

METHOD 513.1

1056 SHUT UNIT DOWN TO REPAIR INSTRUMENTS

1108 START UNIT FOR 710.1.3.2 (F) (3) CIRCUIT

INTERUPTER FOR SHORT CIRCUIT MEANS

513.1

1109 APPLIED RATED LOAD (LIMLO)

1117 APPLIED SHORT CIRCUIT TO GEN SET SHORT

CIRCUIT INDICATOR IS ON, ON THE WARNING

PANEL

1134 CLOSED CIRCUIT BREAKER APPLIED RATED LOAD

(GEN SET)

1137 SHORT CIRCUIT TO LIMLO SHORT CIRCUIT

INDICATOR LIT ON GEN SET

1132 CLOSED CIRCUIT BREAKER ON GEN SET

APPLYING FULL LOAD (LIMLO)

1136 APPLIED SHORT CIRCUIT TO SHORT CIRCUIT INDICATOR

LIT ON GEN SET

1140 RESET CIRCUIT BREAKER ON GEN SET

CONNECTED SHORT BETWEEN LIMLO

1142 APPLIED SHORT CIRCUIT TO LIMLO INDICATOR

LIT ON GEN SET

1146 RESET CIRCUIT BREAKER ON GEN SET

1147 APPLIED SHORT CIRCUIT TO LIMLO INDICATOR

LIT ON GEN SET

1151 RESET CIRCUIT BREAKER ON GEN SET

1153 APPLIED SHORT CIRCUIT TO LIMLO SET INDICATOR

LIT

1155 RESET CIRCUIT BREAKER ON GEN SET

1157 APPLIED SHORT CIRCUIT TO LIMLO

1158 SHUT UNIT DOWN END OF TEST

1215 STARTED UNIT UP APPLIED FULL RATED LOAD

STABILIZING FOR DIP AND RISE 710.1.3.2 (F) (9)

METHOD 604.2

14 NOV 87

1316 START DIP AND RISE 710.1,3.2 (F) (9)

METHOD 6.19.2

1323 SHUT UNIT DOWN END OF TEST

1327 STARTED GEN SET

1401 SHUT UNIT DOWN

1432 START UNIT FULL RATED LOAD FOR STABILIZATION

CIRCUIT INTERRUPTION OVERCURE 710.1,3.2 (F) (4) METHOD 512.2

1500 OVERLOAD BREAKER OPENED AS UNIT WAS PUT IN AN OVERLOAD SITUATION 78:58

1527 APPLIED RATED LOAD FOR COOL DOWN

1530 AFTER 130% CURT TO C.1

1532 OVERLOAD BREAKER OPENED AS UNIT WAS PUT

IN OVERLOAD SITUATION AFTER 9 MIN. 53 SEC.

1555 AFTER 130% CURT TO C.2

1557 OVERLOAD BREAKER OPENED AFTER 9 MIN. 57 SEC.

1600 AFTER 130% CURT TO C.3

1602 OVERLOAD BREAKER OPENED AFTER 9 MIN. 57 SEC.

1604 AFTER 130% CURT TO C.4

1644 UNIT SHUT DOWN ON OVER TEMP

1646 STARTED UNIT IN BATTLE SHUT NO LOAD

1651 AFTER FULL LOAD

1728 SHUT UNIT DOWN END OF TEST.

16 NOV 1987

1945 STARTED UNIT IN LOAD TO PERFORM

(CIRCUIT INTERRUPTION TEST (OVERCURE AND UNDERCURE))

1958 CIRCUIT INTERRUPTION TEST, SET SHUT DOWN ON CURT ON.

2000 CIRCUIT INTERRUPTION TEST, SET SHUT DOWN ON CURT ON.

2002 CIRCUIT INTERRUPTION TEST, SET SHUT DOWN ON CURT ON.

17 NOV. 87

0916 ADDED 1 QUART OF OIL MEETING THE HILL

STANDARD MIL-L-2104D FOR OIL

17 NOV 87

1106 710.1,3.2 (F) (10) METHOD 655.1,3.2

DC CONTROL TEST

1107 STARTED GEN SET OFF OF SLAVE BATTERIES

1109 SHUT UNIT DOWN CHARGED BATTERY PLINITY

ATTEMPTING RESTART SET QUEST NAVE

REVERSE PLINITY PROTECTION

1113 PLINITY CORRECT APPLIED RATED LOAD

1115 DISCHARGED BATTERIES WHILE SET IS

OPERATING

1123 SET CONTINUED NORMAL OPERATION

1127 NO LOAD

1146 SHUT UNIT DOWN

115 STARTED UNIT PLACED ON RATED LOAD

FOR METHOD 615.2A BLOCKED EXHAUST

AIR OUTLET

1429 UNIT SHUT DOWN ON OVERTEMP AT 237°F

INDICATOR LIGHT DID NOT LIGHT

1450 STARTED UNIT FOR MAX POWER 640.1C

1621 RESTARTED UNIT FOR MAX POWER 640.1C

1752 SHUT UNIT DOWN END OF TEST

18 NOV 1987

1045 PERFORMED SMOKE TEST ON GEN SET. STARTED UNIT

1147 SHUT UNIT DOWN CHARGED SMOKE CANE TEST

1148 STARTED UNIT TO STABILIZE FOR FUELING

AND WITNESS DECOMMISSION TEST METHOD 614.1.

1715 SHUT UNIT DOWN FOR DROP TEST LIFT ON OPERATION.

FIRST WITNESS OPERATORS DROPS CAME OPEN AFTER FIRST

SECOND DROP OPERATORS DROPS CAME OPEN AND

WITNESS OFF MEETER STATION FULL PHOTOGRAPH

THIRD WITNESS OPERATORS DROPS CAME OPEN

WITNESS OFF MEETER STATION AND RIGHT AFT

SIDE DROPS CAME OPEN VERTICAL PLINITY WITNESS

FOURTH DROP ALL THE ABOVE PLUS LEFT

AFT DROPS CAME OPEN

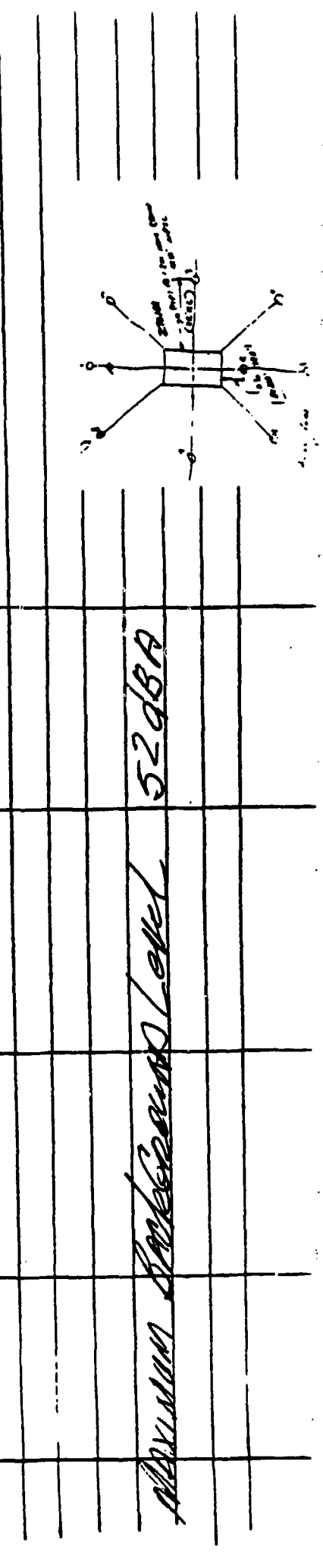
18 NOV. 87

FIFTH DROP ALL THE ABOVE AND LEFT FORWARD
DOOR CAME OPEN
SIXTH DROP SAME AS FIFTH DROP
LIFT AT EXHAUST EN
FIRST DROP RIGHT AFT DOOR CAME
OPEN WOULDN'T CLOSE METAL TORN @ ACROSS
RADIATOR TOP (RIGHT CORNER)
SECOND DROP LEFT AFT DOOR CAME OPEN
THIRD DROP METAL TORN IN RIGHT TOP
CORNER OF RIG. ALSO LEFT SIDE STRUTTING
SOME FATIGUE LEFT AFT DOOR CAME OPEN
ALONG WITH RIGHT AFT DOOR WHICH
STILL WENT CLOSE
FOURTH DROP SAME AMOUNT OF DAMAGE
AS THIRD

FIFTH DROP NO MORE VISIBLE DAMAGE SEEN
ENGINE FUEL COMING OUT FROM UNDER INTAKE
SIDE OF S. P

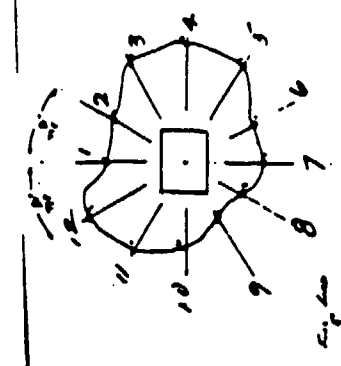
SIXTH DROP PANEL ABOVE RAD TORN ON CORNER
APPROX 1 INCH AND PANEL WARPED ACROSS TOP
TOP BOTM AFT ENGINE COMPARTMENT DOORS
WENT CLOSE (AFT BENT DOOR JAMS NOT
SOURCE) AND FUEL TANK SURE CAUSING FUEL LEAKS TOP OF TANK
1900 STARTED UNIT NO PROBLEMS STARTED TO
STABILIZE AT R/L FOR A FREQUENCY AND
VOLTAGE REGULATION TEST

END SHUT DOWN TEST COMPLETE
ALSO RIGHT DOOR OF OPERATOR'S PANEL DEPOSIT
CLOSE PROPERLY
ALSO EXHAUST END LEFT LINE TOP OF TANK
HEAT AND CAME OFF



TEST ITEM: 3000000 SN: R253774 HOUR METER: UNMODIFIED MODIFIED
 TEMPERATURE: 72 HUMIDITY: 57 TEST SITE: HAKIRUO
 SURFACE: GRASS TERRAIN: FLAT SKY COVER: PARTLY CLOUDY
 BAROMETRIC PRESSURE: 29.15 WIND VELOCITY: 10 MPH MICROPHONE: _____
 WIND DIRECTION: NW OCTAVE ANALYZER: N/A
 SOUND LEVEL METER: GR 1112 NO LOAD MICROPHONE LOCATION: 15 BELOW
 LOAD CONDITION: RATED

DATE	TIME	MICROPHONE POSITION	DISTANCE (ft)	DBA	REMARKS
10-14-67	1557	1	0	80	Position 1 - Control Panel
		2	0	77	2-12 Clockwise
		3	0	78	
		4	0	79	
		5	0	78	
		6	2' 8"	85	
		7	3' 5"	85	
		8	0	82	
		9	0	82	
		10	0	83	
		11	0	81	
		12	0	79	
10-14-67	1605				

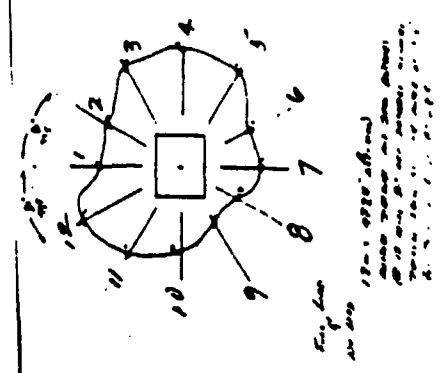


DISTANCES OF "0" DENOTE WHEN MICROPHONE
 PLACES IN CONTACT WITH GEN. HOUSING

TEST ITEM: 30 KW 50/60 Hz SET ACCOUSTIC AGE SN: RZ5374 MAXIMUM NOISE LEVEL DBA MODIFIED
 TEMPERATURE: 72 HUMIDITY: 57 HOUR METER: 34.0 UNMODIFIED TEST SITE: HARTWOOD

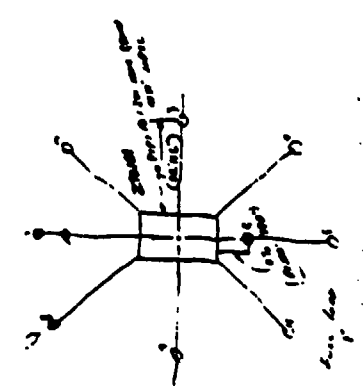
SURFACE: GRASS TERRAIN: FLAT SKY COVER: Partly Cloudy
 BAROMETRIC PRESSURE: 29.715 WIND VELOCITY: < 10 MPH MICROPHONE: N/A
 WIND DIRECTION: NW SOUND LEVEL METER: GL 1982 OCTAVE ANALYZER: N/A
 LOAD CONDITION: ✓ Rated No Load MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (Feet)	DBA	REMARKS
12-14-87	1605	1	0	83	Position 1 - Control Panel 2 - 12 - Clockwise
		2	0	81	
		3	0	82	
		4	0	82	
		5	0	82	
		6	2' 10"	85	
		7	3' 10"	85	
		8	0	83	
		9	0	83	
		10	0	83	
		11	0	83	
		12	0	79	
12-14-87	1605				
		1606			
DISTANCES OF "0" DENOTE WHEN MICROPHONE COMES IN CONTACT WITH GEN. HEADSTAKE					

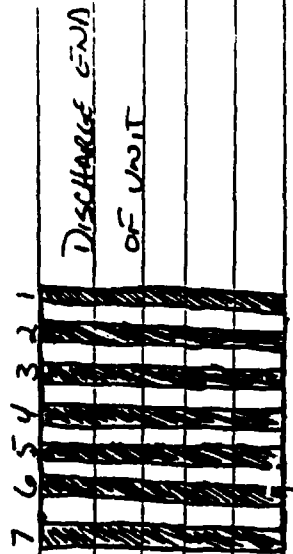


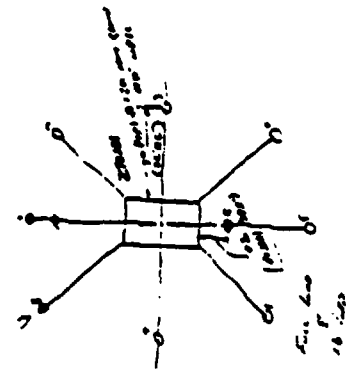
TEST ITEM: 30 kHz SN: R25 3224 HOUR METER: UNMODIFIED ✓ MODIFIED
 TEMPERATURE: 72 HUMIDITY: 57 TEST SITE: ALBUQUERQUE
 SURFACE: Grass TERRAIN: FLAT SKY COVER: Partly Cloudy
 BAROMETRIC PRESSURE: 29.75 WIND DIRECTION: NW WIND VELOCITY: ≤ 10 mph MICROPHONE: NA
 SOUND LEVEL METER: GR 192E OCTAVE ANALYZER: NA
 LOAD CONDITION: ✓ RATED — NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (ft)	DBA	REMARKS
10-14-81	1554	1	7m	66	
		2	7m	69	
		3	7m	69	
		4	7m	68	
		5	7m	68	
		6	7m	70	
		7	7m	69	
		8	7m	68	
		9	0.7m	80	
10-11-81	1558				



TEST ITEM: 30 W/60 Hz
 TEMPERATURE: 69°F
 SURFACE: GRASS
 BAROMETRIC PRESSURE: 29.75
 WIND DIRECTION: N/A
 SOUND LEVEL METER: GR 1983
 LOAD CONDITION: RATED
 SN: R25 3774
 HUMIDITY: 63%
 TERRAIN:
 SKY COVER: OVERCAST
 HOUR METER: 70.1
 CONFIGURATION: UNMODIFIED
 TEST SITE: HARTFORD
 N. VIFIED

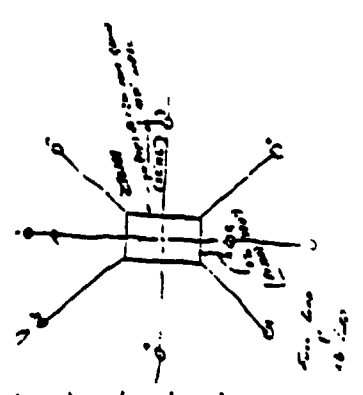
DATE	TIME	MICROPHONE POSITION	DISTANCE (FEET)	DBA	REMARKS
11-5-87	1500	1	7M	65.4	
		2	7M	68.0	
		3	7M	68.3	
		4	7M	68.2	
		5	7M	66.6	
		6	7M	68.0	
		7	7M	66.8	AFT BARRIER NUMBERED RIGHT TO
		8	7M	66.2	LEFT FACING AFT - FORWARD
11-5-87	1504	9	7M	79.8	TEST #1 ALL BARRIERS IN PLACE
					NO LOAD



B-125

TEST ITEM: 30Kw/60Hz Gen Set MAXIMUM NOISE LEVEL 70.1
 TEMPERATURE: 69°F Humidity: 65% Hour Meter: UNMODIFIED
 SURFACE: Grass Terrain: SKY COVER: OVERCAST
 BAROMETRIC PRESSURE: 29.75 WIND VELOCITY: 0 MICROPHONE: CR1512
 WIND DIRECTION: N/A SOUND LEVEL METER: 81522 OCTAVE ANALYZER:
 LOAD CONDITION: 1 RATED NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FT.)	DBA	REMARKS
11-5-67	1504	1	7 M	66.1	
		2	7 M	68.2	
		3	7 M	67.1	
		4	7 M	66.5	
		5	7 M	66.0	
		6	7 M	67.6	
		7	7 M	66.5	
		8	7 M	67.5	
11-5-67	1508	9	7 M	83.4	TEST #1 ALL BARRIERS IN PLACE RATED LOAD

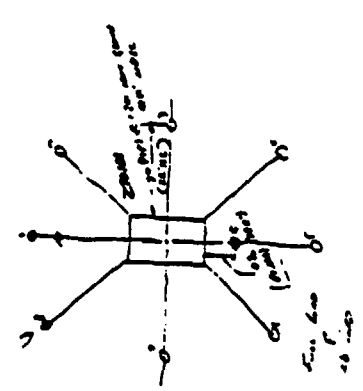


8-126

TEST ITEM: 30x40x60cm 600 SET SYN: RZS 3774 Hour Meter: 10.1 UNMODIFIED MODIFIED
 TEMPERATURE: 69°F Humidity: 63% TEST SITE: HARTZ

SURFACE: Grass TERRAIN: SKY COVER: Overcast
 BAROMETRIC PRESSURE: 29.75 WIND DIRECTION: N/A WIND VELOCITY: 0 MICROPHONE: CA1962
 SOUND LEVEL METER: Griff ACTIVE ANALYZER: NO LOAD MICROPHONE LOCATION: 15 BELOW
 LOAD CONDITION: RATED

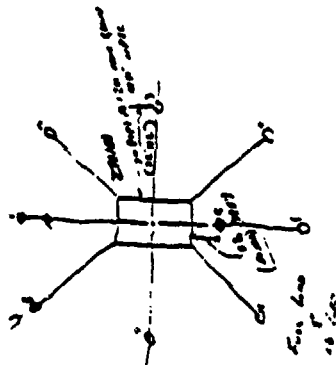
Date	Time	Microphone Position	Distance (Feet)	DBA	Remarks
1-5-67	1511	1	7M	65.5	
		2	7M	68.8	
		3	7M	68.1	
		4	7M	68.2	
		5	7M	66.7	
		6	7M	67.4	
		7	7M	66.7	
		8	7M	65.9	
		9	7M	79.7	
1-5-67	1518				TEST #2 - 2-10mm 2000 Baffle removed
					NO LOAD



TEST ITEM: 30Kw/60Hz AW SET SN: E25 3724 HOUR METER: 10.1 UNMODIFIED ☒ MODIFIED ☐
TEMPERATURE: 69°F HUMIDITY: 63% TEST SITE: HARTLAND

SURFACE: GRASS TERRAIN:
 BAROMETRIC PRESSURE: 29.75 SKY COVER: OVERCAST
 WIND DIRECTION: N/A WIND VELOCITY: 0 MICROPHONE: GR19C2
 SOUND LEVEL METER: GR19B2 OCTAVE ANALYZER:
 LOAD CONDITION: ✓ RATED — NO LOAD MICROPHONE LOCATION: 15

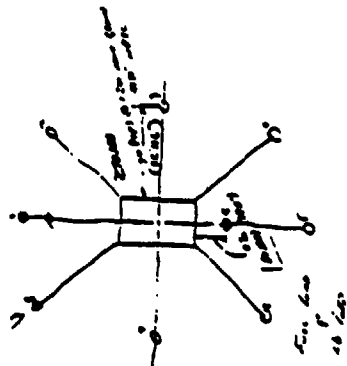
DATE	TIME	MICROPHONE POSITION	DISTANCE (FEET)	DBA	REMARKS
11-5-57	1515	1	7M	66.8	
		2	7M	68.9	
		3	7M	67.5	
		4	7M	67.0	
		5	7M	65.6	
		6	7M	67.6	
		7	7M	66.7	
		8	7M	68.0	
11-5-57	1578	9	7M	80.8	TEST #2 - NUMBER ONE RATED LOAD



TEST ITEM: 30 kW/60 MHz SN: R25 3774 HOUR METER: 70.2
 TEMPERATURE: 69°F HUMIDITY: 63% TEST SITE: HARTWOOD — UNMODIFIED — MODIFIED

SURFACE: GRASS TERRAIN: — SKY COVER: OVERCAST
 BAROMETRIC PRESSURE: 29.75 WIND VELOCITY: 0 MICROPHONE: GR1962
 WIND DIRECTION: N/A OCTAVE ANALYZER: —
 SOUND LEVEL METER: GERRA
 LOAD CONDITION: — RATED — NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (Feet)	DBA	REMARKS
11-587	1521	1	7M	66.6	
		2	7M	68.5	
		3	7M	68.2	
		4	7M	67.8	
		5	7M	66.1	
		6	7M	67.9	
		7	7M	66.4	
		8	7M	66.5	
11-587	1525	9	7M	79.5	TEST #3 - 3-DIMENSIONAL RATTLE REARWARD
					NO LOAD



INSTR. INSTR.:

CONFIGURATION	UNMODIFIED	MODIFIED
TEST SITE:	HARTWOOD	

TEMPERATURE: 69°F

Humidity: 63%

SURFACE: GLASS

EXPLAIN:

BAROMETRIC PRESSURE: 29.75

SKY COVER: OVERCAST

Wind Direction: NA

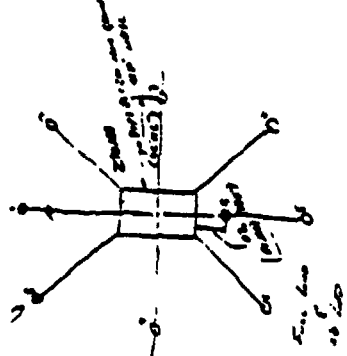
WIND VELOCITY: 0 MICROPHONE: CA 1962

SOUND LEVEL METER: 68/90/92

CRATIVE ANSWER:

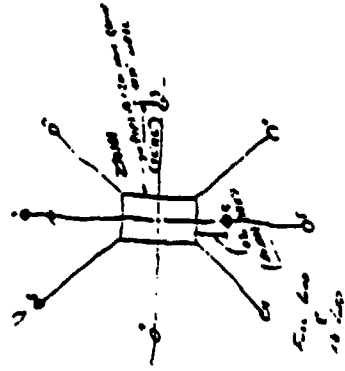
LOAD CONDITION: 1 RATED MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FEET)	DBA	REMARKS
1/5/59	1525	1	7M	67.8	
		2	7M	69.7	
		3	7M	68.5	
		4	7M	68.8	
		5	7M	67.2	
		6	7M	65.9	
		7	7M	67.9	
		8	7M	68.1	
1/25/59	1530	9	7M	61.6	TEST #3 - UNDER TWO BATTLE REMNED LOADED COAL



TEST ITEM: 30kW/60Hz 600 SET
 TEMPERATURE: 69°F
 SURFACE: GRS
 BAROMETRIC PRESSURE: 29.75
 WIND DIRECTION: N/A
 SOUND LEVEL METER: GR92
 LOAD CONDITION: RATED
 SN: 225 3774
 HUMIDITY: 63%
 TERRAIN:
 SKY COVER: OVERCAST
 WIND VELOCITY: 0
 MICROPHONE: GR92
 OCTAVE ANALYZER:
 NO LOAD
 MICROPHONE LOCATION: 15 BELOW
 TEST #4 NUMBER THREE BATTLE REMOVED
 NO LOAD

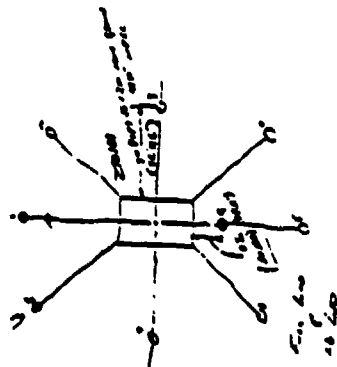
DATE	TIME	MICROPHONE POSITION	DISTANCE (FT)	DBA	REMARKS
11-5-87	1534	1	7M	65.7	
		2	7M	67.1	
		3	7M	66.9	
		4	7M	67.6	
		5	7M	65.8	
		6	7M	67.7	
		7	7M	66.2	
		8	7M	65.9	
		9	7M	79.2	
11-5-87	1535				TEST #4 NUMBER THREE BATTLE REMOVED NO LOAD



TEST ITEM: 30KHz/60Hz 500 SET
 TEMPERATURE: 69.4
 SURFACE: GRASS
 BAROMETRIC PRESSURE: 29.75
 WIND DIRECTION: NA
 SOUND LEVEL METER: GENIE
 LOAD CONDITION: 1 Rated
 SN: R25 3774
 HUMIDITY: 63%
 TERRAIN:
 SKY COVER: OVERCAST
 HOUR METER: 70.3
 CONFIGURATION: UNMODIFIED
 TEST SITE: HARTWOOD
 MODIFIED:

WIND VELOCITY: 0 MICROPHONE: CR1902
 OCTAVE ANALYZER:
 MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (Feet)	DBA	REMARKS
11/5/87	1538	1	7m	67.0	
		2	7m	69.4	
		3	7m	68.5	
		4	7m	68.6	
		5	7m	66.8	
		6	7m	68.9	
		7	7m	67.6	
		8	7m	68.2	
11/5/87	1542	9	7m	80.0	TEST #4 NUMBER THREE BACKE REMOVED
					RATED GOOD



2

11/06/2017

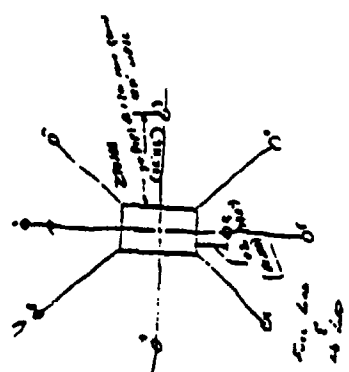
Mo

Fig. 1

Fig. 2

TEST ITEM: 30 INCH 100 HR 11/5/87 1551
 TEMPERATURE: 69°F HUMIDITY: 63%
 SURFACE: GRASS TERRAIN: SKY COVER: OVERCAST
 BAROMETRIC PRESSURE: 29.75 WIND DIRECTION: NW WIND VELOCITY: 0 MICROPHONE: GR 1562
 SOUND LEVEL METER: GEMER OCTAVE ANALYZER: UNMODIFIED / MODIFIED
 TEST SITE: HARTWOOD
 TEST #5 NUMBER FOR DATA RECORD

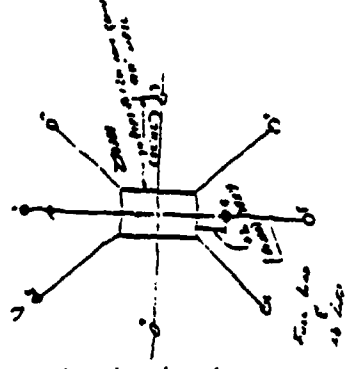
DATE	TIME	MICROPHONE POSITION	DISTANCE (FT)	DBA	REMARKS
11/5/87	1551	1	7m	66.9	
		2	7m	69.5	
		3	7m	68.4	
		4	7m	68.7	
		5	7m	66.5	
		6	7m	68.2	
		7	7m	66.7	
		8	7m	68.1	
11/5/87	1555	9	7m	80.1	TEST #5 NUMBER FOR DATA RECORD
					DATA CARD



TEST ITEM: 30W/60Hz 3000/60Hz
 TEMPERATURE: 69°F
 SURFACE: GRASS
 WIND DIRECTION: NA
 SOUND LEVEL METER: GERMER
 LOAD CONDITION: RATED
 SN: 825 374
 HUMIDITY: 63%
 TERRAIN: SKY COVER: OVERCAST
 HOUR METER: 70.5
 CONFIGURATION: UNMODIFIED
 TEST SITE: UNMODIFIED
 MODIFIED

WIND VELOCITY: 0 MICROPHONE: GR1962
 OCTAVE ANALYZER:
 MICROPHONE LOCATION: 15 BELOW

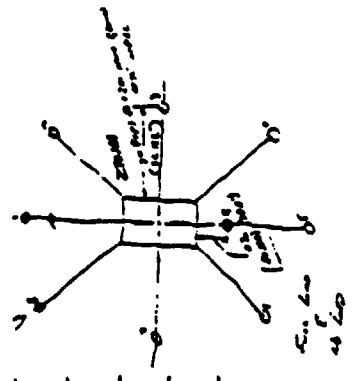
DATE	TIME	MICROPHONE POSITION	DISTANCE (FT.)	DBA	REMARKS
11-5-81	1600	1	7M	66.1	
		2	7M	67.8	
		3	7M	66.0	
		4	7M	66.1	
		5	7M	65.6	
		6	7M	67.7	
		7	7M	66.0	
		8	7M	65.2	
11-5-81	1624	9	7M	79.0	TEST #6 NUMBER FIVE BATTERY REMOVED NO LOAD



TEST ITEM: 30 km/60 Hz 600 SET SN: 125 3714 HOUR METER: 10.8 UNMODIFIED / MODIFIED
 TEMPERATURE: 69°F HUMIDITY: 63% TEST SITE: HARTWOOD

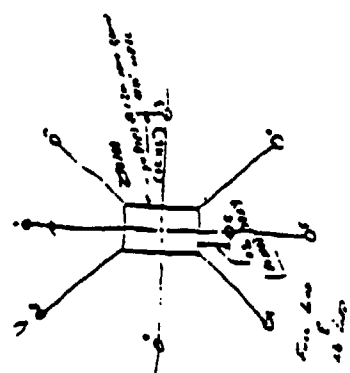
SURFACE: GRASS TERRAIN: SKY COVER: OVERCAST
 BAROMETRIC PRESSURE: 29.75 WIND VELOCITY: 0 MICROPHONE: GRIEGL
 WIND DIRECTION: NA SOUND LEVEL METER: GRIEGL OCTAVE ANALYZER: ---
 LOAD CONDITION: 1 RATED --- NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FT.)	DBA	REMARKS
11-5-87	1604	1	7M	67.3	
		2	7M	69.8	
		3	7M	68.4	
		4	7M	68.9	
		5	7M	66.3	
		6	7M	68.0	
		7	7M	66.6	
		8	7M	68.2	
11-5-87	1607	9	7M	80.0	TEST #6 NUMBER FIVE BATTERY REMOVED
					RATED LOAD



TEST ITEM: 30kW/60Hz 60250 SN: 625 374 Hour Meter: 70.6 UNMODIFIED MODIFIED
 TEMPERATURE: 69°F Humidity: 63% TEST SITE: ABERDEEN
 SURFACE: GRASS TERRAIN:
 BAROMETRIC PRESSURE: 27.75 SKY COVER: OVERCAST
 WIND DIRECTION: NA WIND VELOCITY: 0 MICROPHONE: CR1962
 SOUND LEVEL METER: CEP22 OCTAVE ANALYZER:
 LOAD CONDITION: RATED NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FT)	DBA	REMARKS
11-5-87	1611	1	7M	66.0	
		2	7M	68.1	
		3	7M	65.4	
		4	7M	65.3	
		5	7M	66.2	
		6	7M	67.6	
		7	7M	65.9	
		8	7M	65.6	
		9	7M	78.6	
11-5-87	1615				TEST #7 NUMBER 3x BRILLIANT
					NO LOAD



TEST ITEM: 30KHz/60Hz 60dB SET SN: RES 3774 HOUR METER: 70.7 CONFIGURATION: UNMODIFIED TEST SITE: UNTESTED MODIFIED

TEMPERATURE: 69°F HUMIDITY: 63% TERRAIN: OVERCAST

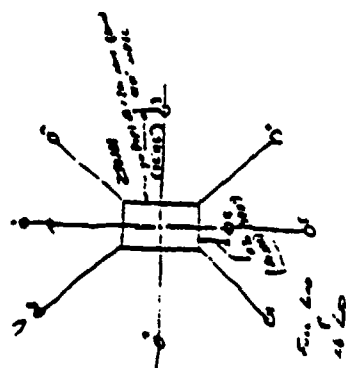
SURFACE: GRASS BAROMETRIC PRESSURE: 29.75 SKY COVER: OVERCAST

WIND DIRECTION: NA WIND VELOCITY: 0 MICROPHONE: GR512

SOUND LEVEL METER: 621932 OCTAVE ANALYZER: ---

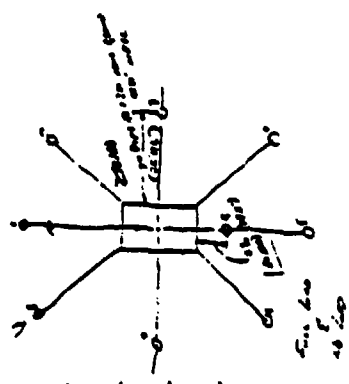
LOAD CONDITION: --- RATED --- NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FT)	DBA	REMARKS
11/5/87	1618	1	7m	66.5	
		2	7m	66.0	
		3	7m	66.8	
		4	7m	66.0	
		5	7m	65.5	
		6	7m	68.4	
		7	7m	66.9	
		8	7m	66.6	
		9	7m	71.0	
11/5/87	1622				TEST DONE WITH DAMPED NUMBERS
					THREE & FIVE DAMPED
					NO LOAD

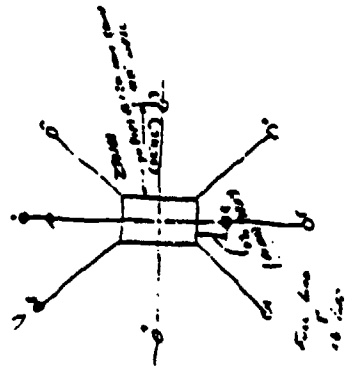


TEST ITEM: 30.00/60.00 SN: 025 3774 HOUR METER: 70.3
 TEMPERATURE: 69% HUMIDITY: 63% TEST SITE: UNMODIFIED
 SURFACE: GRASS TERRAIN: OVERCAST
 BAROMETRIC PRESSURE: 29.75 SKY COVER: OVERCAST
 WIND DIRECTION: NA WIND VELOCITY: 0 MICROPHONE: GR1962
 SOUND LEVEL METER: GR1962 OCTAVE ANALYZER: NA
 LOAD CONDITION: ✓ RATED — NO LOAD MICROPHONE LOCATION: AS BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FT.)	DBA	REMARKS
11-5-67	1622	1	7m	68.7	
		2	7m	70.2	
		3	7m	68.5	
		4	7m	68.8	
		5	7m	67.1	
		6	7m	69.5	
		7	7m	68.3	
		8	7m	68.6	
		9	7m	68.9	
11-5-67	1626				TEST DONE WITH BACKER NUMBERS THREE & FIVE REMOVED. RATED LOAD



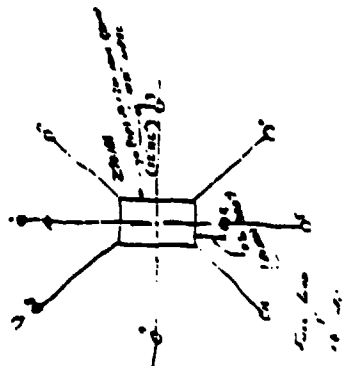
Load Condition: Rated ✓ No Load ✓ Microphone Location: 15 Below

[illegible]

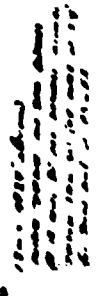
SURFACE: GRASS TERRAIN: _____
 BAROMETRIC PRESSURE: 29.748 SKY COVER: CLEAR
 WIND DIRECTION: NW WIND VELOCITY: 5 MPH MICROPHONE: _____
 SOUND LEVEL METER: GR 1902 OCTAVE ANALYZER: _____
 LOAD CONDITION: _____ RATED ✓ NO LOAD MICROPHONE LOCATION: 15' BELOW

TEST ITEM: 30 KW, 60 Hz GRD SET SYN: 225 374 HOUR METER: 1026
TEMPERATURE: 78 °F HUMIDITY: CONFIGURATION: UNMODIFIED ✓ MODIFIED
SURFACE: GRASS TERRAIN: TEST SITE: HARTWOOD
BAROMETRIC PRESSURE: 29.748 SKY COVER: CLEAR
WIND DIRECTION: NW WIND VELOCITY: 5 MPH MICROPHONE:
SOUND LEVEL METER: GR 1902 OCTAVE ANALYZER:
LOAD CONDITION: ✓ RATED — NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (FEET) (M)	DBA	REMARKS
11-10-87	1054	1	7m	68	SOUND LEVEL TEST PERFORMED
11-19-87		2	7m	70	FOR FINAL TESTING CONFIGURATION
		3	7m	69	"CENTER OUTLET GASKETS REMOVED"
		4	7m	69	ORIGINAL POLYCY INSTANCES
		5	7m	68	
		6	7m	69	
		7	7m	67	
		8	7m	68	
	1058	9	7m	84	



SURFACE: GRASS TERRAIN:
 BAROMETRIC PRESSURE: 29.740 SKY COVER: CLEAR
 WIND DIRECTION: NW WIND VELOCITY: 5 MPH MICROPHONE:
 SOUND LEVEL METER: GL1902 OCTAVE ANALYZER:
 LOAD CONDITION: ✓ RATED — NO LOAD MICROPHONE LOCATION: 15 BELOW



MS

REF. NO. MIL-STD 705

SHEET 1 OF 1

DATE 11-6-87

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER K. MALEY

G. CARTER

ITEM 30 Kw 60Hz

GEN SET

MODIFIED

MFG. LIBBY WELDING

MODEL NO. MEPO05A

SERIAL NO. RZ53774

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

124°F WINDING RESISTANCE

TEST DATA

INST TIME	STEP NO.	LOAD STEP	E60250 VOLTAGE X1			E60400 AMPERES X40			E62700 KILOWATTS X40			E6282 POWER		E6281 FREQ.		E61890 EXCITER FIELD		AMB. TEMP. °F	PRESS. W/O
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW	FACTOR PF	Hz	VOLTS VDC	AMPS DCA				
1457			APPLIED RATED LOAD TO UNIT TO STABILIZE																
1500		1/4	120	122	121	2.5	2.52	2.52	.25	.253	.25	.81	60.1	86	3.3	116	83/44		
1510		1/4	120	123	121	2.5	2.55	2.57	.25	.258	.25	.85	57.7	93	3.7	122	83/39		
1520		1/4	120	123	121	2.5	2.58	2.58	.25	.258	.25	.81	57.7	97	3.6	124	83/36		
1530		1/4	120	122	121	2.5	2.52	2.52	.25	.255	.25	.81	60.2	98	3.5	122	83/35		
1540		1/4	120.5	123	121	2.5	2.55	2.55	.25	.255	.25	.81	60.1	99	3.6	123	83/37		
1550		1/4	120.5	123	121	2.5	2.55	2.55	.25	.258	.25	.81	60.1	120	3.6	128	83/37		

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NOTES:

TEST DATA

MTS

TEST 30KW 60HZ

GENERATOR SET

MODIFIED

UPGR. LIBBY WEAVING

MODEL NO. MRP 005A

SERIAL NO. R25379

REF. NO. MIL-STD 205

SHEET 1 OF 2

DATE 6 NOV 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER G. CARRER

National Technical Systems
Scientific Services Group
Testing Division
P.O. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

HIGH TEMP

WINDING RESISTANCE TEST METHOD 401.1a

TEST NO	TIME HRS	ELC 2470 DIAL READING	MULTIPLIER	LEAD RESISTANCE	WINDING RESIS. OHMS	WINDING	WINDING CORR TO 60°F 25°C	AVG. AMBIENT TEMP.	TEMP
1555	1.3	2.700	10 ⁻³	0.0013	2.700	GEN FIELD	2.45	124.2	43.5
		100.0	10 ⁻³		0.1000	T1 T4	.091		64.5
		99.1	10 ⁻³		0.0991	T2 T5	.090		62.4
		101.1	10 ⁻³		0.1011	T3 T6	.092		62.4
		106.0	10 ⁻³		0.1060	T7 T10	.092		62.5
		97.0	10 ⁻³		0.0970	T8 T11	.088		60.4
		94.4	10 ⁻³		0.0944	T9 T12	.086		61.2
							2.44	124.2	
		2.69	1		2.69	GEN FIELD	2.44		42.4
		98.6	10 ⁻³		0.0986	T1 T4	.0895		52.9
		92.5	10 ⁻³		0.0925	T2 T5	.089		58.2
		100.0	10 ⁻³		0.1000	T3 T6	.091		58.9
		95.6	10 ⁻³		0.0956	T7 T10	.0905		58.0
		95.8	10 ⁻³		0.0958	T8 T11	.087		56.4
		93.4	10 ⁻³		0.0934	T9 T12	.085		57.8
		2.71	1		2.71	GEN FIELD	2.46		44.6
		95.3	10 ⁻³		0.0953	T1 T4	.0898		59.0
		92.4	10 ⁻³		0.0924	T2 T5	.0885		56.7
		99.4	10 ⁻³		0.0994	T3 T6	.0903		57.0
		94.3	10 ⁻³		0.0943	T7 T10	.0902		57.1
		95.5	10 ⁻³		0.0955	T8 T11	.0867		55.4
		93.0	10 ⁻³		0.0930	T9 T12	.0839		56.4
		2.72	1		2.72	GEN FIELD	2.47		45.6
		97.7	10 ⁻³		0.0977	T1 T4	.0887		57.0

NOTES:

TEST DATA

MI 30KV 60Hz

GENERATOR SET

MODIFIED

CR. LIBBY WELDING

DEL. NO. MEP 005A

REAL. NO. RZ53774

NAS

National
Technical
Systems

Scientific
Services
Group

Insling Division
P.O. Box 38
Hamwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIC-STD 705

SHEET 2 OF 2

DATE 6 AUG 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER G. CARTER

WINDING RESISTANCE TEST METHOD 401.1a

HIGH TEMP

TIME HRS	ELC 2470 DIAL READING	MULTIPLIER	LEAD RESISTANCE	WINDING RESIS. ΩMS	WINDING	WINDING CORR TO 60°F AS 2	AVG. AMBIENT TEMP.	TEMP RISE DEG C
	96.8	10 ⁻³		0.0968	T2	T5	124°F	54.5
	99.0	10 ⁻³		0.0990	T3	T6		55.7
	98.6	10 ⁻³		0.0986	T7	T10		54.9
	95.0	10 ⁻³		0.0950	T8	T11		53.8
	92.8	10 ⁻³		0.0928	T9	T12		54.7
	2.64	1		2.64	GEN	FIELD		36.8
	97.1	10 ⁻³		0.0971	T1	T4		55.1
	96.4	10 ⁻³		0.0964	T2	T5		53.6
	98.6	10 ⁻³		0.0986	T3	T6		54.5
	98.2	10 ⁻³		0.0982	T7	T10		53.6
	94.6	10 ⁻³		0.0946	T8	T11		52.5
	92.2	10 ⁻³		0.0922	T9	T12		63.7
	2.70	1		2.70	GEN	FIELD		43.5
	96.7	10 ⁻³		0.0967	T1	T4		53.8
	96.1	10 ⁻³		0.0961	T2	T5		52.7
	98.3	10 ⁻³		0.0983	T3	T6		53.5
	92.9	10 ⁻³		0.0929	T7	T10		52.6
	94.5	10 ⁻³		0.0945	T8	T11		52.1
	91.7	10 ⁻³		0.0917	T9	T12		52.0

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150

RESISTANCE X .01

.040 Ω

TR = 62.4°C

30 KW 60 HZ GEN SET
S/N R25-3774
WINDING T2 - T5

.091 Ω

TR = 64.5°C

30 KW 60 HZ GEN SET
S/N R25-3774
WINDING T1 - T4

RESISTANCE X .01

0 30 60 90 120 150 180 210

RESISTANCE X .01

TR = 62.5°C

30 KW 60 HZ GEN SET
S/N R2-5-3774
WINDING T7-T10

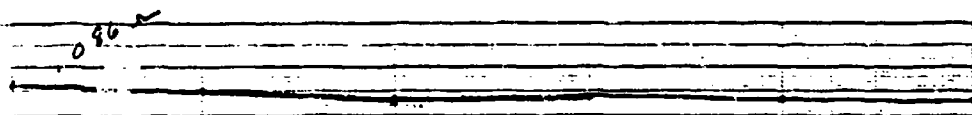
RESISTANCE X .01

TR = 58.0°C

30 KW 60 HZ GEN SET
S/N R2-5-3774
WINDING T3-T6

0 30 60 90 120 150 180 210

RESISTANCE X .01

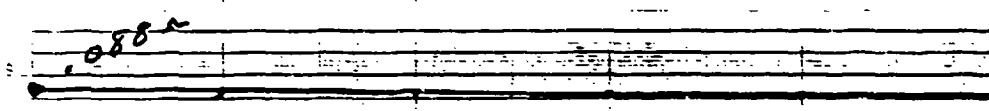


TR = 66.2°C

30 KW 60 Hz GEN SET

S/N RZ 5-3774

WINDING T9 - T12



TR = 60.4°C

30 KW 60 Hz GEN SET

S/N RZ 5-3774

WINDING T8 - T11

RESISTANCE X .01

0 30 60 90 120 150 180 210

B-153

Resistance x 1

$T = 45.6^{\circ}\text{C}$

2.47 s

30kW 60Hz GEN SET
SN R2-S-3774, WINDING F1-F2

0 30 60 90 120 150 180 210

High Temp Winding Resistance

BEGIN SCAN GROUP 1 06 NOV 87 14:57:34
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	735.85	DEG.	F	ALM
2	EXHAUST 2	762.03	DEG.	F	ALM
3	EXHAUST 3	783.68	DEG.	F	ALM
4	EXHAUST 4	761.86	DEG.	F	ALM
5	EXHAUST 5	764.12	DEG.	F	ALM
6	EXHAUST 6	740.66	DEG.	F	ALM
7	ENG. COOL. IN	176.97	DEG.	F	ALM
8	ENG. COOL. OUT	186.75	DEG.	F	ALM
9	OIL SUMP	165.15	DEG.	F	ALM
10	OIL GALLERY	169.00	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	189.83	DEG.	F	ALM
14	RAD. TOP LEFT	123.84	DEG.	F	ALM
15	RAD. BTM LEFT	117.27	DEG.	F	ALM
16	RAD. TOP RIGHT	116.55	DEG.	F	ALM
17	RAD. BTM RIGHT	120.02	DEG.	F	ALM
18	GEN. AIR IN	108.88	DEG.	F	ALM
19	GEN. AIR OUT	106.39	DEG.	F	ALM
20	GEN. FRAME TOP	94.710	DEG.	F	ALM
21	GEN. FRAME BTM	91.346	DEG.	F	ALM
22	GEN. EXCITER	107.76	DEG.	F	ALM
23	GEN. VOLT. REG.	84.865	DEG.	F	ALM
24	CONTROL PANEL	88.354	DEG.	F	ALM
25	RELAY AREA	103.95	DEG.	F	ALM
26	BATTERY LEFT	79.907	DEG.	F	ALM
27	BATTERY RIGHT	78.110	DEG.	F	ALM
28	AIR IN SET	111.29	DEG.	F	ALM
29	FUEL TANK	75.067	DEG.	F	ALM
30	FUEL OUTLET	93.170	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 14:57:44

STOPPED SINGLE SCAN 06 NOV 87 14:57:44

BEGIN SCAN GROUP 1 06 NOV 87 14:59:56
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	742.76	DEG.	F	ALM
2	EXHAUST 2	770.27	DEG.	F	ALM
3	EXHAUST 3	792.37	DEG.	F	ALM
4	EXHAUST 4	765.89	DEG.	F	ALM
5	EXHAUST 5	771.89	DEG.	F	ALM
6	EXHAUST 6	746.68	DEG.	F	ALM
7	ENG. COOL. IN	180.38	DEG.	F	ALM
8	ENG. COOL. OUT	189.88	DEG.	F	ALM
9	OIL SUMP	176.03	DEG.	F	ALM
10	OIL GALLERY	179.81	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	115.36	DEG.	F	ALM
14	RAD. TOP LEFT	129.55	DEG.	F	ALM
15	RAD. BTM LEFT	121.81	DEG.	F	ALM
16	RAD. TOP RIGHT	120.14	DEG.	F	ALM
17	RAD. BTM RIGHT	124.18	DEG.	F	ALM
18	GEN. AIR IN	114.43	DEG.	F	ALM
19	GEN. AIR OUT	112.45	DEG.	F	ALM
20	GEN. FRAME TOP	100.83	DEG.	F	ALM
21	GEN. FRAME BTM	97.358	DEG.	F	ALM
22	GEN. EXCITER	113.67	DEG.	F	ALM
23	GEN. VOLT. REG.	88.736	DEG.	F	ALM
24	CONTROL PANEL	93.677	DEG.	F	ALM
25	RELAY AREA	110.72	DEG.	F	ALM
26	BATTERY LEFT	81.726	DEG.	F	ALM
27	BATTERY RIGHT	79.514	DEG.	F	ALM
28	AIR IN SET	116.70	DEG.	F	ALM
29	FUEL TANK	76.849	DEG.	F	ALM
30	FUEL OUTLET	99.369	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:00:06

STOPPED SINGLE SCAN 06 NOV 87 15:00:06

BEGIN SCAN GROUP 1 06 NOV 87 15:09:13
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	761.31	DEG.	F	ALM
2	EXHAUST 2	785.19	DEG.	F	ALM
3	EXHAUST 3	812.10	DEG.	F	ALM
4	EXHAUST 4	779.36	DEG.	F	ALM
5	EXHAUST 5	784.67	DEG.	F	ALM
6	EXHAUST 6	763.36	DEG.	F	ALM
7	ENG. COOL. IN	187.35	DEG.	F	ALM
8	ENG. COOL. OUT	199.17	DEG.	F	ALM
9	OIL SUMP	204.01	DEG.	F	ALM
10	OIL GALLERY	207.52	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	127.52	DEG.	F	ALM
14	RAD. TOP LEFT	141.24	DEG.	F	ALM
15	RAD. BTM LEFT	134.07	DEG.	F	ALM
16	RAD. TOP RIGHT	132.74	DEG.	F	ALM
17	RAD. BTM RIGHT	136.15	DEG.	F	ALM
18	GEN. AIR IN	120.94	DEG.	F	ALM
19	GEN. AIR OUT	126.18	DEG.	F	ALM
20	GEN. FRAME TOP	116.80	DEG.	F	ALM
21	GEN. FRAME BTM	112.94	DEG.	F	ALM
22	GEN. EXCITER	124.79	DEG.	F	ALM
23	GEN. VOLT. REG.	103.20	DEG.	F	ALM
24	CONTROL PANEL	111.56	DEG.	F	ALM
25	RELAY AREA	121.47	DEG.	F	ALM
26	BATTERY LEFT	88.246	DEG.	F	ALM
27	BATTERY RIGHT	83.050	DEG.	F	ALM
28	AIR IN SET	122.96	DEG.	F	ALM
29	FUEL TANK	80.363	DEG.	F	ALM
30	FUEL OUTLET	118.15	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:09:44

STOPPED SINGLE SCAN 06 NOV 87 15:09:44

BEGIN SCAN GROUP 1 06 NOV 87 15:20:14
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	769.27	DEG.	F	ALM
2	EXHAUST 2	791.22	DEG.	F	ALM
3	EXHAUST 3	822.24	DEG.	F	ALM
4	EXHAUST 4	789.89	DEG.	F	ALM
5	EXHAUST 5	793.13	DEG.	F	ALM
6	EXHAUST 6	775.73	DEG.	F	ALM
7	ENG. COOL. IN	193.13	DEG.	F	ALM
8	ENG. COOL. OUT	206.07	DEG.	F	ALM
9	OIL SUMP	219.18	DEG.	F	ALM
10	OIL GALLERY	222.83	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	130.79	DEG.	F	ALM
14	RAD. TOP LEFT	145.73	DEG.	F	ALM
15	RAD. BTM LEFT	139.44	DEG.	F	ALM
16	RAD. TOP RIGHT	138.62	DEG.	F	ALM
17	RAD. BTM RIGHT	142.71	DEG.	F	ALM
18	GEN. AIR IN	122.30	DEG.	F	ALM
19	GEN. AIR OUT	133.77	DEG.	F	ALM
20	GEN. FRAME TOP	123.99	DEG.	F	ALM
21	GEN. FRAME BTM	119.85	DEG.	F	ALM
22	GEN. EXCITER	120.75	DEG.	F	ALM
23	GEN. VOLT. REG.	112.82	DEG.	F	ALM
24	CONTROL PANEL	122.20	DEG.	F	ALM
25	RELAY AREA	125.87	DEG.	F	ALM
26	BATTERY LEFT	93.441	DEG.	F	ALM
27	BATTERY RIGHT	87.583	DEG.	F	ALM
28	AIR IN SET	124.60	DEG.	F	ALM
29	FUEL TANK	86.804	DEG.	F	ALM
30	FUEL OUTLET	131.39	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:20:24

STOPPED SINGLE SCAN 06 NOV 87 15:20:24

BEGIN SCAN GROUP 1 06 NOV 87 15:30:38
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	772.24	DEG.	F	ALM
2	EXHAUST 2	796.01	DEG.	F	ALM
3	EXHAUST 3	823.43	DEG.	F	ALM
4	EXHAUST 4	787.04	DEG.	F	ALM
5	EXHAUST 5	788.66	DEG.	F	ALM
6	EXHAUST 6	774.03	DEG.	F	ALM
7	ENG. COOL. IN	197.12	DEG.	F	ALM
8	ENG. COOL. OUT	209.38	DEG.	F	ALM
9	OIL SUMP	227.77	DEG.	F	ALM
10	OIL GALLERY	230.92	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	130.93	DEG.	F	ALM
14	RAD. TOP LEFT	146.49	DEG.	F	ALM
15	RAD. BTM LEFT	140.72	DEG.	F	ALM
16	RAD. TOP RIGHT	148.91	DEG.	F	ALM
17	RAD. BTM RIGHT	143.14	DEG.	F	ALM
18	GEN. AIR IN	120.61	DEG.	F	ALM
19	GEN. AIR OUT	136.99	DEG.	F	ALM
20	GEN. FRAME TOP	127.11	DEG.	F	ALM
21	GEN. FRAME BTM	122.66	DEG.	F	ALM
22	GEN. EXCITER	128.94	DEG.	F	ALM
23	GEN. VOLT. REG.	119.13	DEG.	F	ALM
24	CONTROL PANEL	127.72	DEG.	F	ALM
25	RELAY AREA	126.19	DEG.	F	ALM
26	BATTERY LEFT	98.854	DEG.	F	ALM
27	BATTERY RIGHT	91.441	DEG.	F	ALM
28	AIR IN SET	122.59	DEG.	F	ALM
29	FUEL TANK	91.542	DEG.	F	ALM
30	FUEL OUTLET	148.17	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:30:48

STOPPED SINGLE SCAN 06 NOV 87 15:30:48

BEGIN SCAN GROUP 1 06 NOV 87 15:40:28
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	774.07	DEG.	F	ALM
2	EXHAUST 2	796.11	DEG.	F	ALM
3	EXHAUST 3	822.86	DEG.	F	ALM
4	EXHAUST 4	787.06	DEG.	F	ALM
5	EXHAUST 5	790.21	DEG.	F	ALM
6	EXHAUST 6	771.01	DEG.	F	ALM
7	ENG. COOL. IN	201.38	DEG.	F	ALM
8	ENG. COOL. OUT	209.46	DEG.	F	ALM
9	OIL SUMP	231.16	DEG.	F	ALM
10	OIL GALLERY	234.44	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	130.63	DEG.	F	ALM
14	RAD. TOP LEFT	147.21	DEG.	F	ALM
15	RAD. BTM LEFT	141.71	DEG.	F	ALM
16	RAD. TOP RIGHT	142.14	DEG.	F	ALM
17	RAD. BTM RIGHT	144.56	DEG.	F	ALM
18	GEN. AIR IN	121.23	DEG.	F	ALM
19	GEN. AIR OUT	139.16	DEG.	F	ALM
20	GEN. FRAME TOP	127.79	DEG.	F	ALM
21	GEN. FRAME BTM	123.43	DEG.	F	ALM
22	GEN. EXCITER	129.54	DEG.	F	ALM
23	GEN. VOLT. REG.	121.97	DEG.	F	ALM
24	CONTROL PANEL	130.03	DEG.	F	ALM
25	RELAY AREA	127.11	DEG.	F	ALM
26	BATTERY LEFT	103.02	DEG.	F	ALM
27	BATTERY RIGHT	94.749	DEG.	F	ALM
28	AIR IN SET	123.79	DEG.	F	ALM
29	FUEL TANK	96.465	DEG.	F	ALM
30	FUEL OUTLET	142.25	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:40:38

STOPPED SINGLE SCAN 06 NOV 87 15:40:38

BEGIN SCAN GROUP 1 06 NOV 87 15:50:14
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	775.22	DEG.	F	ALM
2	EXHAUST 2	797.25	DEG.	F	ALM
3	EXHAUST 3	820.96	DEG.	F	ALM
4	EXHAUST 4	787.66	DEG.	F	ALM
5	EXHAUST 5	790.71	DEG.	F	ALM
6	EXHAUST 6	773.35	DEG.	F	ALM
7	ENG. COOL. IN	202.53	DEG.	F	ALM
8	ENG. COOL. OUT	210.63	DEG.	F	ALM
9	OIL SUMP	233.32	DEG.	F	ALM
10	OIL GALLERY	236.38	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.00	DEG.	F	ALM
14	RAD. TOP LEFT	147.77	DEG.	F	ALM
15	RAD. BTM LEFT	142.46	DEG.	F	ALM
16	RAD. TOP RIGHT	143.11	DEG.	F	ALM
17	RAD. BTM RIGHT	146.60	DEG.	F	ALM
18	GEN. AIR IN	121.51	DEG.	F	ALM
19	GEN. AIR OUT	140.89	DEG.	F	ALM
20	GEN. FRAME TOP	128.67	DEG.	F	ALM
21	GEN. FRAME BTM	124.30	DEG.	F	ALM
22	GEN. EXCITER	130.10	DEG.	F	ALM
23	GEN. VOLT. REG.	125.03	DEG.	F	ALM
24	CONTROL PANEL	131.29	DEG.	F	ALM
25	RELAY AREA	127.52	DEG.	F	ALM
26	BATTERY LEFT	106.23	DEG.	F	ALM
27	BATTERY RIGHT	98.148	DEG.	F	ALM
28	AIR IN SET	123.81	DEG.	F	ALM
29	FUEL TANK	101.11	DEG.	F	ALM
30	FUEL OUTLET	144.06	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:50:25

STOPPED SINGLE SCAN 06 NOV 87 15:50:25

BEGIN SCAN GROUP 1 06 NOV 87 15:51:21
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	777.09	DEG.	F	ALM
2	EXHAUST 2	799.25	DEG.	F	ALM
3	EXHAUST 3	822.13	DEG.	F	ALM
4	EXHAUST 4	785.66	DEG.	F	ALM
5	EXHAUST 5	788.54	DEG.	F	ALM
6	EXHAUST 6	772.49	DEG.	F	ALM
7	ENG. COOL. IN	202.52	DEG.	F	ALM
8	ENG. COOL. OUT	210.78	DEG.	F	ALM
9	OIL SUMP	233.38	DEG.	F	ALM
10	OIL GALLERY	236.61	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.11	DEG.	F	ALM
14	RAD. TOP LEFT	147.83	DEG.	F	ALM
15	RAD. BTM LEFT	142.64	DEG.	F	ALM
16	RAD. TOP RIGHT	143.29	DEG.	F	ALM
17	RAD. BTM RIGHT	146.40	DEG.	F	ALM
18	GEN. AIR IN	122.16	DEG.	F	ALM
19	GEN. AIR OUT	141.25	DEG.	F	ALM
20	GEN. FRAME TOP	128.75	DEG.	F	ALM
21	GEN. FRAME BTM	124.38	DEG.	F	ALM
22	GEN. EXCITER	130.43	DEG.	F	ALM
23	GEN. VOLT. REG.	125.09	DEG.	F	ALM
24	CONTROL PANEL	131.64	DEG.	F	ALM
25	RELAY AREA	127.75	DEG.	F	ALM
26	BATTERY LEFT	106.74	DEG.	F	ALM
27	BATTERY RIGHT	98.385	DEG.	F	ALM
28	AIR IN SET	124.36	DEG.	F	ALM
29	FUEL TANK	101.60	DEG.	F	ALM
30	FUEL OUTLET	145.04	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 15:51:32

STOPPED SINGLE SCAN 06 NOV 87 15:51:32

END SCAN GROUP 1 06 NOV 87 16:02:33
 STOPPED SINGLE GEN SET 5 HRES 3774

000	001	EXHAUST 1	293.77	DEG.	F	ALM
000	002	EXHAUST 2	323.76	DEG.	F	ALM
000	003	EXHAUST 3	334.59	DEG.	F	ALM
000	004	EXHAUST 4	332.09	DEG.	F	ALM
000	005	EXHAUST 5	329.06	DEG.	F	ALM
000	006	EXHAUST 6	308.37	DEG.	F	ALM
000	007	ENG. COOL. IN	176.99	DEG.	F	ALM
000	008	ENG. COOL. OUT	224.31	DEG.	F	ALM
000	009	OIL SUMP	229.37	DEG.	F	ALM
000	010	OIL GALLERY	216.66	DEG.	F	ALM
000	011		.00000			
000	012		.00000			
000	013	ENG. INTAKE	151.21	DEG.	F	ALM
000	014	RAD. TOP LEFT	191.46	DEG.	F	ALM
000	015	RAD. BTM LEFT	169.87	DEG.	F	ALM
000	016	RAD. TOP RIGHT	176.67	DEG.	F	ALM
000	017	RAD. BTM RIGHT	159.01	DEG.	F	ALM
000	018	GEN. AIR IN	117.58	DEG.	F	ALM
000	019	GEN. AIR OUT	133.36	DEG.	F	ALM
000	020	GEN. FRAME TOP	138.95	DEG.	F	ALM
000	021	GEN. FRAME BTM	125.66	DEG.	F	ALM
000	022	GEN. EXCITER	145.33	DEG.	F	ALM
000	023	GEN. VOLT. REG.	129.74	DEG.	F	ALM
000	024	CONTROL PANEL	138.74	DEG.	F	ALM
000	025	RELAY AREA	149.56	DEG.	F	ALM
000	026	BATTERY LEFT	109.59	DEG.	F	ALM
000	027	BATTERY RIGHT	102.39	DEG.	F	ALM
000	028	AIR IN SET	104.26	DEG.	F	ALM
000	029	FUEL TANK	103.81	DEG.	F	ALM
000	030	FUEL OUTLET	147.99	DEG.	F	ALM

END SCAN GROUP 1 06 NOV 87 16:02:43

STOPPED SINGLE SCAN 06 NOV 87 16:02:43

TEST DATA

ITEM 30 KW 60 Hz

GEN SET

MOLUFIEL

MPCR. LIBBY WELDING

MODEL NO. MPR 005A

SERIAL NO. RZ53774

MAS

National
Technical
SystemsScientific
Services
GroupTesting Division
PO Box 38
Haltwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705; 511.1

SHEET 1 OF 1

DATE 9 Nov 1987

JOB NO. 555-2140

PROJ. ENCR.

RECORDER/OBSERVER RJ KM GC

REGULATOR RANGE TEST

INST TIME	STEP NO.	LOAD STEP	E60280 VOLTAGE			E60400 AMPERES X 40			E62300 KILOWATTS X 40			E62420 POWER		E61870 EXCITER FIELD		AMB. TEMP. °F	PRES. IN/EXH IN/H ₂ O		
			L ₁ - VAC	L ₂ - VAC	L ₃ - VAC	L ₁ - AC MPF.	L ₂ - AC MPF.	L ₃ - AC MPF.	L ₁ - KW	L ₂ - KW	L ₃ - KW	FACTOR	PF	VOLTS VDC	AMPS DCA				
1030		A	APPLIED	R/L	208	208	208	2.47	2.5	2.5	2.45	2.5	2.47	.805	52.9	8.8	3.4	123	13.3/35
1040		R/L	208	208	208	2.5	2.54	2.54	2.48	2.52	2.49	.80	52.9	9.0	3.4	124	13.3/35		
1050		R/L	208.5	209	208	2.45	2.5	2.5	2.42	2.5	2.45	.81	52.9						
1052		ADJUSTED	LOAD																
1100		R/L	208	208	208	2.5	2.54	2.54	2.48	2.52	2.49	.80	52.9	9.2	3.5	123	13.3/35		
1110		R/L	208	208	208	2.5	2.54	2.54	2.48	2.52	2.49	.80	52.9	9.4	3.6	123	13.3/35		
1120		R/L	208	208	208	2.5	2.54	2.54	2.48	2.52	2.49	.80	52.9	9.4	3.6	123	13.3/35		
1127		UNIT	SHUT DOWN			OVER	TEMP												
		OPERATED	TOP INLET			BAF	FEL												
1130		RESTARTED	UNIT			N/L				COOL DOWN									
1138		REMOVED	BATTLESHOOT			- PLACED ON	R/L												
1150		R/L	208	209	208	2.5	2.55	2.55	2.45	2.57	2.5	.81	60.1	9.3	3.5	124	13.3/35		
1200		R/L	208.5	209	208.5	2.5	2.55	2.55	2.49	2.57	2.5	.81	60.1	9.4	3.5	125	13.3/35		
1210		R/L	208.5	209	208.5	2.5	2.55	2.55	2.49	2.57	2.5	.81	60.1	9.4	3.5	124	13.3/35		
1220	1	R/L	208.5	209	208.5	2.5	2.55	2.55	2.49	2.57	2.5	.81	60.1	9.4	3.5	123	13.3/35		
1223	2	N/L	210	210	210	0	0	0	0	0	0	0	62.2	3.9	1.5	123	14.5/37.2		
1225	3	N/L	240	240	240	0	0	0	0	0	0	0	62.2	5.6	2.1	123	14.5/37.2		
1228	4	R/L	235	239	239	2.15	2.15	2.16	2.5	2.55	2.5	.83	60.1	11.4	4.2	123	13.3/35		
1232	5	N/L	260	260	260	0	0	0	0	0	0	0	62	2.9	7.6	123	14.5/37.2		
1236	6	R/L	258	259	258	2.2	2.25	2.25	2.7	2.75	2.71	.80	52.9	16.2	6.0	123	13.3/35		
1241	7	R/L	196	198	196	2.67	2.57	2.57	2.5	2.57	2.5	.80	52.9	9.4	3.4	123	13.3/35		
1243	8	N/L	200	200	200	0	0	0	0	0	0	0	62.1	3.6	1.3	123	14.5/37.2		
1246	9	N/L	170	170	170	0	0	0	0	0	0	0	62	2.6	1.0	123	14.5/37.2		
1247		SHUT UNIT DOWN				END	UF	TEST											

NOTES:

STAS

REF. NO. NYC JD 205: 511.1
SHEET 1 OF 1
DATE 9 NOV 1987
JOB NO. _____
PROJ. ENGR. _____
RECORDER/OBSERVER BJ/KM/CC

**National
Technical
Systems**
**Scientific
Services
Group**
Testing Division
P.O. Box 38
Hatfield, Virginia 22471
Tel: 703 752 5300

Regulator Kanyo Computation Sheet

INST. →		VOLTAGE					VOLTS		REG.
TIME	LOAD	L1 - L2	L2 - L3	L3 - L1		AVERAGE		PERCENT	
1220	R/L	208.5	209	208.5		208.7			
	N/L	210	210	210		210		.62	
	N/L	240	240	240		240			
	R/L	239	239	239		239		.41	
	N/L	260	260	260		260			
	R/L	258	259	258		258.3		.67	
	R/L	196	198	196		197			
	N/L	200	200	200		200		1.52	
	N/L	170	170	170		170			

Where percent of regulation is defined as:

$$\frac{V_{NL. \text{ avg.}} - V_{RL \text{ avg.}}}{V_{RL \text{ avg.}}} \times 100$$

MAXIMUM ALLOWABLE % OF REGULATION IS 3% FOR UTILITY UNITS - UNIT PASSED

Notes:

Where percent of regulation is defined as:

$$\frac{V_{NL} \text{ avg.} - V_{RL} \text{ avg.}}{V_{RL} \text{ avg.}} \times 100$$

REGULATOR RANGE TEST 511.1

BEGIN SCAN GROUP 1 09 NOV 87 10:40:01
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	764.25	DEG.	F	ALM
C	2	EXHAUST 2	786.31	DEG.	F	ALM
C	3	EXHAUST 3	810.83	DEG.	F	ALM
C	4	EXHAUST 4	782.34	DEG.	F	ALM
C	5	EXHAUST 5	781.67	DEG.	F	ALM
C	6	EXHAUST 6	763.80	DEG.	F	ALM
C	7	ENG. COOL. IN	202.72	DEG.	F	ALM
C	8	ENG. COOL. OUT	210.55	DEG.	F	ALM
C	9	OIL SUMP	217.16	DEG.	F	ALM
C	10	OIL GALLERY	220.19	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	135.10	DEG.	F	ALM
C	14	RAD. TOP LEFT	151.09	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.81	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.87	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.99	DEG.	F	ALM
C	18	GEN. AIR IN	122.86	DEG.	F	ALM
C	19	GEN. AIR OUT	135.39	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.94	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.89	DEG.	F	ALM
C	22	GEN. EXCITER	131.59	DEG.	F	ALM
C	23	GEN. VOLT. REG.	126.46	DEG.	F	ALM
C	24	CONTROL PANEL	132.46	DEG.	F	ALM
C	25	RELAY AREA	131.47	DEG.	F	ALM
C	26	BATTERY LEFT	101.15	DEG.	F	ALM
C	27	BATTERY RIGHT	98.182	DEG.	F	ALM
C	28	AIR IN SET	124.56	DEG.	F	ALM
C	29	FUEL TANK	83.898	DEG.	F	ALM
C	30	FUEL OUTLET	143.02	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 10:40:11

STOPPED SINGLE SCAN 09 NOV 87 10:40:11

BEGIN SCAN GROUP 1 09 NOV 87 11:00:20
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	777.47	DEG.	F	ALM
C	2	EXHAUST 2	797.30	DEG.	F	ALM
C	3	EXHAUST 3	819.17	DEG.	F	ALM
C	4	EXHAUST 4	784.65	DEG.	F	ALM
C	5	EXHAUST 5	791.23	DEG.	F	ALM
C	6	EXHAUST 6	769.60	DEG.	F	ALM
C	7	ENG. COOL. IN	207.80	DEG.	F	ALM
C	8	ENG. COOL. OUT	215.77	DEG.	F	ALM
C	9	OIL SUMP	230.92	DEG.	F	ALM
C	10	OIL GALLERY	234.70	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	136.24	DEG.	F	ALM
C	14	RAD. TOP LEFT	153.47	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.01	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.64	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.69	DEG.	F	ALM
C	18	GEN. AIR IN	121.42	DEG.	F	ALM
C	19	GEN. AIR OUT	140.07	DEG.	F	ALM
C	20	GEN. FRAME TOP	128.50	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.18	DEG.	F	ALM
C	22	GEN. EXCITER	130.27	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.24	DEG.	F	ALM
C	24	CONTROL PANEL	135.62	DEG.	F	ALM
C	25	RELAY AREA	132.14	DEG.	F	ALM
C	26	BATTERY LEFT	107.65	DEG.	F	ALM
C	27	BATTERY RIGHT	102.54	DEG.	F	ALM
C	28	AIR IN SET	123.64	DEG.	F	ALM
C	29	FUEL TANK	90.091	DEG.	F	ALM
C	30	FUEL OUTLET	145.17	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 11:00:30

STOPPED SINGLE SCAN 09 NOV 87 11:00:30

BEGIN SCAN GROUP 1 09 NOV 87 11:10:00
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	776.40	DEG.	F	ALM
C	2	EXHAUST 2	793.27	DEG.	F	ALM
C	3	EXHAUST 3	817.08	DEG.	F	ALM
C	4	EXHAUST 4	784.52	DEG.	F	ALM
C	5	EXHAUST 5	790.32	DEG.	F	ALM
C	6	EXHAUST 6	770.21	DEG.	F	ALM
C	7	ENG. COOL. IN	207.54	DEG.	F	ALM
C	8	ENG. COOL. OUT	215.82	DEG.	F	ALM
C	9	OIL SUMP	232.76	DEG.	F	ALM
C	10	OIL GALLERY	236.32	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	135.82	DEG.	F	ALM
C	14	RAD. TOP LEFT	153.39	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.83	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.67	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.85	DEG.	F	ALM
C	18	GEN. AIR IN	120.67	DEG.	F	ALM
C	19	GEN. AIR OUT	140.70	DEG.	F	ALM
C	20	GEN. FRAME TOP	120.18	DEG.	F	ALM
C	21	GEN. FRAME BTM	122.91	DEG.	F	ALM
C	22	GEN. EXCITER	130.13	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.31	DEG.	F	ALM
C	24	CONTROL PANEL	135.56	DEG.	F	ALM
C	25	RELAY AREA	131.97	DEG.	F	ALM
C	26	BATTERY LEFT	109.75	DEG.	F	ALM
C	27	BATTERY RIGHT	104.64	DEG.	F	ALM
C	28	AIR IN SET	123.06	DEG.	F	ALM
C	29	FUEL TANK	92.909	DEG.	F	ALM
C	30	FUEL OUTLET	145.20	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 11:10:14

STOPPED SINGLE SCAN 09 NOV 87 11:10:15

BEGIN SCAN GROUP 1 09 NOV 87 11:19:14
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	774.71	DEG.	F	ALM
C	2	EXHAUST 2	794.45	DEG.	F	ALM
C	3	EXHAUST 3	816.35	DEG.	F	ALM
C	4	EXHAUST 4	785.81	DEG.	F	ALM
C	5	EXHAUST 5	788.84	DEG.	F	ALM
C	6	EXHAUST 6	769.69	DEG.	F	ALM
C	7	ENG. COOL. IN	208.22	DEG.	F	ALM
C	8	ENG. COOL. OUT	216.05	DEG.	F	ALM
C	9	OIL SUMP	234.00	DEG.	F	ALM
C	10	OIL GALLERY	236.94	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	136.33	DEG.	F	ALM
C	14	RAD. TOP LEFT	154.13	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.53	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.30	DEG.	F	ALM
C	17	RAD. BTM RIGHT	150.31	DEG.	F	ALM
C	18	GEN. AIR IN	122.05	DEG.	F	ALM
C	19	GEN. AIR OUT	141.97	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.59	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.13	DEG.	F	ALM
C	22	GEN. EXCITER	130.76	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.31	DEG.	F	ALM
C	24	CONTROL PANEL	135.65	DEG.	F	ALM
C	25	RELAY AREA	132.48	DEG.	F	ALM
C	26	BATTERY LEFT	111.33	DEG.	F	ALM
C	27	BATTERY RIGHT	106.51	DEG.	F	ALM
C	28	AIR IN SET	123.72	DEG.	F	ALM
C	29	FUEL TANK	95.358	DEG.	F	ALM
C	30	FUEL OUTLET	145.37	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 11:19:24

STOPPED SINGLE SCAN 09 NOV 87 11:19:24

BEGIN SCAN GROUP 1 09 NOV 87 11:27:43
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	660.13	DEG.	F	ALM
C	2	EXHAUST 2	680.68	DEG.	F	ALM
C	3	EXHAUST 3	693.47	DEG.	F	ALM
C	4	EXHAUST 4	673.78	DEG.	F	ALM
C	5	EXHAUST 5	676.51	DEG.	F	ALM
C	6	EXHAUST 6	666.08	DEG.	F	ALM
C	7	ENG. COOL. IN	208.87	DEG.	F	ALM
C	8	ENG. COOL. OUT	217.10	DEG.	F	ALM
C	9	OIL SUMP	234.96	DEG.	F	ALM
C	10	OIL GALLERY	237.51	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	136.98	DEG.	F	ALM
C	14	RAD. TOP LEFT	156.60	DEG.	F	ALM
C	15	RAD. BTM LEFT	147.80	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.68	DEG.	F	ALM
C	17	RAD. BTM RIGHT	150.71	DEG.	F	ALM
C	18	GEN. AIR IN	122.27	DEG.	F	ALM
C	19	GEN. AIR OUT	143.19	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.17	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.74	DEG.	F	ALM
C	22	GEN. EXCITER	130.80	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.24	DEG.	F	ALM
C	24	CONTROL PANEL	136.13	DEG.	F	ALM
C	25	RELAY AREA	133.59	DEG.	F	ALM
C	26	BATTERY LEFT	113.23	DEG.	F	ALM
C	27	BATTERY RIGHT	108.30	DEG.	F	ALM
C	28	AIR IN SET	123.88	DEG.	F	ALM
C	29	FUEL TANK	97.493	DEG.	F	ALM
C	30	FUEL OUTLET	146.67	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 11:27:53

STOPPED SINGLE SCAN 09 NOV 87 11:27:53

BEGIN SCAN GROUP 1 09 NOV 87 11:47:50
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	768.98	DEG.	F	ALM
C	2	EXHAUST 2	787.86	DEG.	F	ALM
C	3	EXHAUST 3	808.81	DEG.	F	ALM
C	4	EXHAUST 4	776.16	DEG.	F	ALM
C	5	EXHAUST 5	775.22	DEG.	F	ALM
C	6	EXHAUST 6	757.04	DEG.	F	ALM
C	7	ENG. COOL. IN	199.66	DEG.	F	ALM
C	8	ENG. COOL. OUT	207.51	DEG.	F	ALM
C	9	OIL SUMP	226.85	DEG.	F	ALM
C	10	OIL GALLERY	230.05	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	130.92	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.10	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.36	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.49	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.27	DEG.	F	ALM
C	18	GEN. AIR IN	122.98	DEG.	F	ALM
C	19	GEN. AIR OUT	141.35	DEG.	F	ALM
C	20	GEN. FRAME TOP	128.99	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.11	DEG.	F	ALM
C	22	GEN. EXCITER	130.70	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.92	DEG.	F	ALM
C	24	CONTROL PANEL	132.90	DEG.	F	ALM
C	25	RELAY AREA	127.53	DEG.	F	ALM
C	26	BATTERY LEFT	115.25	DEG.	F	ALM
C	27	BATTERY RIGHT	111.76	DEG.	F	ALM
C	28	AIR IN SET	124.58	DEG.	F	ALM
C	29	FUEL TANK	101.04	DEG.	F	ALM
C	30	FUEL OUTLET	148.50	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 11:48:00

STOPPED SINGLE SCAN 09 NOV 87 11:48:00

BEGIN SCAN GROUP 1 09 NOV 87 11:51:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	767.65	DEG.	F	AL
C	2	EXHAUST 2	789.08	DEG.	F	AL
C	3	EXHAUST 3	812.68	DEG.	F	AL
C	4	EXHAUST 4	780.15	DEG.	F	AL
C	5	EXHAUST 5	777.54	DEG.	F	AL
C	6	EXHAUST 6	759.91	DEG.	F	AL
C	7	ENG. COOL. IN	201.11	DEG.	F	AL
C	8	ENG. COOL. OUT	208.99	DEG.	F	AL
C	9	OIL SUMP	228.80	DEG.	F	AL
C	10	OIL GALLERY	232.07	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.16	DEG.	F	AL
C	14	RAD. TOP LEFT	147.55	DEG.	F	AL
C	15	RAD. BTM LEFT	142.48	DEG.	F	AL
C	16	RAD. TOP RIGHT	143.82	DEG.	F	AL
C	17	RAD. BTM RIGHT	146.74	DEG.	F	AL
C	18	GEN. AIR IN	122.10	DEG.	F	AL
C	19	GEN. AIR OUT	141.78	DEG.	F	AL
C	20	GEN. FRAME TOP	129.19	DEG.	F	AL
C	21	GEN. FRAME BTM	125.19	DEG.	F	AL
C	22	GEN. EXCITER	130.63	DEG.	F	AL
C	23	GEN. VOLT. REG.	133.98	DEG.	F	AL
C	24	CONTROL PANEL	133.00	DEG.	F	AL
C	25	RELAY AREA	127.41	DEG.	F	AL
C	26	BATTERY LEFT	115.87	DEG.	F	AL
C	27	BATTERY RIGHT	112.36	DEG.	F	AL
C	28	AIR IN SET	124.36	DEG.	F	AL
C	29	FUEL TANK	101.67	DEG.	F	AL
C	30	FUEL OUTLET	148.83	DEG.	F	AL

END SCAN GROUP 1 09 NOV 87 11:51:27

STOPPED SINGLE SCAN 09 NOV 87 11:51:27

BEGIN SCAN GROUP 1 09 NOV 87 11:59:50
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	770.41	DEG.	F	AL
C	2	EXHAUST 2	790.90	DEG.	F	AL
C	3	EXHAUST 3	811.69	DEG.	F	AL
C	4	EXHAUST 4	777.07	DEG.	F	AL
C	5	EXHAUST 5	777.54	DEG.	F	AL
C	6	EXHAUST 6	761.98	DEG.	F	AL
C	7	ENG. COOL. IN	202.49	DEG.	F	AL
C	8	ENG. COOL. OUT	210.52	DEG.	F	AL
C	9	OIL SUMP	232.44	DEG.	F	AL
C	10	OIL GALLERY	235.35	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.62	DEG.	F	AL
C	14	RAD. TOP LEFT	148.51	DEG.	F	AL
C	15	RAD. BTM LEFT	143.61	DEG.	F	AL
C	16	RAD. TOP RIGHT	144.92	DEG.	F	AL
C	17	RAD. BTM RIGHT	147.48	DEG.	F	AL
C	18	GEN. AIR IN	122.95	DEG.	F	AL
C	19	GEN. AIR OUT	143.03	DEG.	F	AL
C	20	GEN. FRAME TOP	129.79	DEG.	F	AL
C	21	GEN. FRAME BTM	125.60	DEG.	F	AL
C	22	GEN. EXCITER	131.07	DEG.	F	AL
C	23	GEN. VOLT. REG.	134.01	DEG.	F	AL
C	24	CONTROL PANEL	133.26	DEG.	F	AL
C	25	RELAY AREA	127.87	DEG.	F	AL
C	26	BATTERY LEFT	117.56	DEG.	F	AL
C	27	BATTERY RIGHT	113.90	DEG.	F	AL
C	28	AIR IN SET	125.45	DEG.	F	AL
C	29	FUEL TANK	103.25	DEG.	F	AL
C	30	FUEL OUTLET	148.94	DEG.	F	AL

END SCAN GROUP 1 09 NOV 87 12:00:00

STOPPED SINGLE SCAN 09 NOV 87 12:00:00

BEGIN SCAN GROUP 1 09 NOV 87 12:09:10
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	768.74	DEG.	F	ALM
C	2	EXHAUST 2	791.41	DEG.	F	ALM
C	3	EXHAUST 3	812.75	DEG.	F	ALM
C	4	EXHAUST 4	779.08	DEG.	F	ALM
C	5	EXHAUST 5	774.98	DEG.	F	ALM
C	6	EXHAUST 6	761.01	DEG.	F	ALM
C	7	ENG. COOL. IN	202.96	DEG.	F	ALM
C	8	ENG. COOL. OUT	210.99	DEG.	F	ALM
C	9	OIL SUMP	234.49	DEG.	F	ALM
C	10	OIL GALLERY	237.23	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.45	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.38	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.48	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.14	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.98	DEG.	F	ALM
C	18	GEN. AIR IN	122.77	DEG.	F	ALM
C	19	GEN. AIR OUT	143.63	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.99	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.85	DEG.	F	ALM
C	22	GEN. EXCITER	131.14	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.02	DEG.	F	ALM
C	24	CONTROL PANEL	133.36	DEG.	F	ALM
C	25	RELAY AREA	127.78	DEG.	F	ALM
C	26	BATTERY LEFT	119.53	DEG.	F	ALM
C	27	BATTERY RIGHT	116.11	DEG.	F	ALM
C	28	AIR IN SET	124.92	DEG.	F	ALM
C	29	FUEL TANK	104.98	DEG.	F	ALM
C	30	FUEL OUTLET	148.91	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 12:09:20

STOPPED SINGLE SCAN 09 NOV 87 12:09:20

BEGIN SCAN GROUP 1 09 NOV 87 12:19:37
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	769.25	DEG.	F	ALM
C	2	EXHAUST 2	792.18	DEG.	F	ALM
C	3	EXHAUST 3	812.94	DEG.	F	ALM
C	4	EXHAUST 4	779.42	DEG.	F	ALM
C	5	EXHAUST 5	777.92	DEG.	F	ALM
C	6	EXHAUST 6	762.29	DEG.	F	ALM
C	7	ENG. COOL. IN	203.38	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.37	DEG.	F	ALM
C	9	OIL SUMP	235.83	DEG.	F	ALM
C	10	OIL GALLERY	238.22	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.62	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.57	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.65	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.14	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.03	DEG.	F	ALM
C	18	GEN. AIR IN	121.82	DEG.	F	ALM
C	19	GEN. AIR OUT	143.56	DEG.	F	ALM
C	20	GEN. FRAME TOP	130.16	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.94	DEG.	F	ALM
C	22	GEN. EXCITER	131.18	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.04	DEG.	F	ALM
C	24	CONTROL PANEL	133.29	DEG.	F	ALM
C	25	RELAY AREA	127.55	DEG.	F	ALM
C	26	BATTERY LEFT	120.83	DEG.	F	ALM
C	27	BATTERY RIGHT	117.91	DEG.	F	ALM
C	28	AIR IN SET	124.11	DEG.	F	ALM
C	29	FUEL TANK	106.59	DEG.	F	ALM
C	30	FUEL OUTLET	149.95	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 12:19:47



ITEM 30 Kva, 60 Hz
GENERATOR SET
MODIFIED
MPGR. LIBBY WELDING
MODEL NO. MIP 005A
SERIAL NO. R25 3774

National Technical Systems
Scientific Services Group
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705; 511.2
SHEET 1 OF 1
DATE 9 Nov. 1987
JOB NO. 555-2140
PROJ. ENGR.
RECORDER/OBSERVER G. CARTER

FREQUENCY ADJUSTMENT RANGE.

INST TIME	STEP NO.	LOAD STEP	E60280			E60400			E62300			E62400		E61890		AMB. TEMP. °F
			V1- VAC	V2- VAC	V3- VAC	L1- AC AMPS	L2- AC AMPS	L3- AC AMPS	L1- KW	L2- KW	L3- KW	POWER FACTOR	FREQ. Hz	VOLTS VDC	AMPS DCA	
1311			STARTED	UNIT	LOAD	TO STABILIZE	2.5	2.5	2.5	2.5	2.5	51.2	60.2	9.2	3.5	124
1315		RIL	119.7	120.5	120	2.45	2.5	2.5	2.41	2.5	2.5	.80	60.2	9.2	3.5	123
1325		RIL	119.5	120.5	120	2.45	2.5	2.5	2.41	2.5	2.5	.80	60.1	9.3	3.5	123
1335		RIL	119.5	120.5	120	2.45	2.5	2.5	2.41	2.5	2.5	.80	60.1	9.4	3.5	123
1345		RIL	119.5	120.5	120	2.45	2.5	2.5	2.41	2.5	2.5	.80	60.1	9.5	3.5	123
1355	1	RIL	119.5	120.5	120	2.45	2.63	2.63	2.51	2.6	2.53	.80	61.5	9.2	3.4	122
1400	2	RIL	119.5	120.5	120	2.45	2.63	2.63	2.51	2.6	2.53	.80	61.5	9.2	3.4	122
1405	3	RIL	120	122.5	120	2.4	2.45	2.45	2.41	2.5	2.48	.89	58.0	10.2	3.6	122
1406			END	OF	TEST											

UNIT FAILED TO ADJUST TO 62 Hz MAX ATTAINABLE 61.9 Hz

NOTES:

FREQUENCY ADJUSTMENT RANGE 571.2

BEGIN SCAN GROUP 1 09 NOV 87 13:25:31
30KW 60HZ GEN SET 5 NR25 3774

C	1	EXHAUST 1	764.37	DEG.	F	ALM
C	2	EXHAUST 2	782.27	DEG.	F	ALM
C	3	EXHAUST 3	804.23	DEG.	F	ALM
C	4	EXHAUST 4	783.29	DEG.	F	ALM
C	5	EXHAUST 5	768.83	DEG.	F	ALM
C	6	EXHAUST 6	760.05	DEG.	F	ALM
C	7	ENG. COOL. IN	139.28	DEG.	F	ALM
C	8	ENG. COOL. OUT	207.82	DEG.	F	ALM
C	9	OIL SUMP	222.38	DEG.	F	ALM
C	10	OIL GALLERY	225.58	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.61	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.65	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.99	DEG.	F	ALM
C	17	RAD. BTM RIGHT	145.82	DEG.	F	ALM
C	18	GEN. AIR IN	121.24	DEG.	F	ALM
C	19	GEN. AIR OUT	148.33	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.14	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.24	DEG.	F	ALM
C	22	GEN. EXCITER	138.47	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.01	DEG.	F	ALM
C	24	CONTROL PANEL	132.46	DEG.	F	ALM
C	25	RELAY AREA	127.26	DEG.	F	ALM
C	26	BATTERY LEFT	125.73	DEG.	F	ALM
C	27	BATTERY RIGHT	124.92	DEG.	F	ALM
C	28	AIR IN SET	123.94	DEG.	F	ALM
C	29	FUEL TANK	113.19	DEG.	F	ALM
C	30	FUEL OUTLET	148.64	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 13:25:41

STOPPED SINGLE SCAN 09 NOV 87 13:25:41

BEGIN SCAN GROUP 1 09 NOV 87 13:35:17
30KW 60HZ GEN SET 5 NR25 3774

C	1	EXHAUST 1	762.88	DEG.	F	ALM
C	2	EXHAUST 2	782.88	DEG.	F	ALM
C	3	EXHAUST 3	806.89	DEG.	F	ALM
C	4	EXHAUST 4	783.95	DEG.	F	ALM
C	5	EXHAUST 5	768.70	DEG.	F	ALM
C	6	EXHAUST 6	758.82	DEG.	F	ALM
C	7	ENG. COOL. IN	202.05	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.11	DEG.	F	ALM
C	9	OIL SUMP	238.83	DEG.	F	ALM
C	10	OIL GALLERY	232.96	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.90	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.33	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.84	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.75	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.52	DEG.	F	ALM
C	18	GEN. AIR IN	122.54	DEG.	F	ALM
C	19	GEN. AIR OUT	142.52	DEG.	F	ALM
C	20	GEN. FRAME TOP	130.82	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.72	DEG.	F	ALM
C	22	GEN. EXCITER	131.47	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.19	DEG.	F	ALM
C	24	CONTROL PANEL	133.14	DEG.	F	ALM
C	25	RELAY AREA	128.82	DEG.	F	ALM
C	26	BATTERY LEFT	127.29	DEG.	F	ALM
C	27	BATTERY RIGHT	126.38	DEG.	F	ALM
C	28	AIR IN SET	124.21	DEG.	F	ALM
C	29	FUEL TANK	114.19	DEG.	F	ALM
C	30	FUEL OUTLET	149.59	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 13:35:27

STOPPED SINGLE SCAN 09 NOV 87 13:35:27

BEGIN SCAN GROUP 1 09 NOV 87 13:45:31
30KW 60HZ GEN SET 5 NR25 3774

C	1	EXHAUST 1	761.26	DEG.	F	ALM
C	2	EXHAUST 2	782.21	DEG.	F	ALM
C	3	EXHAUST 3	802.88	DEG.	F	ALM
C	4	EXHAUST 4	778.66	DEG.	F	ALM
C	5	EXHAUST 5	764.88	DEG.	F	ALM
C	6	EXHAUST 6	754.81	DEG.	F	ALM
C	7	ENG. COOL. IN	202.83	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.82	DEG.	F	ALM
C	9	OIL SUMP	233.52	DEG.	F	ALM
C	10	OIL GALLERY	236.38	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.69	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.48	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.57	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.63	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.95	DEG.	F	ALM
C	18	GEN. AIR IN	121.28	DEG.	F	ALM
C	19	GEN. AIR OUT	142.58	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.63	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.61	DEG.	F	ALM
C	22	GEN. EXCITER	138.29	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.15	DEG.	F	ALM
C	24	CONTROL PANEL	133.15	DEG.	F	ALM
C	25	RELAY AREA	126.98	DEG.	F	ALM
C	26	BATTERY LEFT	128.32	DEG.	F	ALM
C	27	BATTERY RIGHT	128.88	DEG.	F	ALM
C	28	AIR IN SET	123.46	DEG.	F	ALM
C	29	FUEL TANK	115.25	DEG.	F	ALM
C	30	FUEL OUTLET	158.18	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 13:45:45

STOPPED SINGLE SCAN 09 NOV 87 13:45:45

BEGIN SCAN GROUP 1 09 NOV 87 13:54:56
30KW 60HZ GEN SET 5 NR25 3774

C	1	EXHAUST 1	768.76	DEG.	F	ALM
C	2	EXHAUST 2	781.73	DEG.	F	ALM
C	3	EXHAUST 3	804.88	DEG.	F	ALM
C	4	EXHAUST 4	778.13	DEG.	F	ALM
C	5	EXHAUST 5	762.92	DEG.	F	ALM
C	6	EXHAUST 6	754.43	DEG.	F	ALM
C	7	ENG. COOL. IN	201.69	DEG.	F	ALM
C	8	ENG. COOL. OUT	209.66	DEG.	F	ALM
C	9	OIL SUMP	234.28	DEG.	F	ALM
C	10	OIL GALLERY	237.18	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.89	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.23	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.27	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.85	DEG.	F	ALM
C	18	GEN. AIR IN	128.69	DEG.	F	ALM
C	19	GEN. AIR OUT	142.48	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.26	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.84	DEG.	F	ALM
C	22	GEN. EXCITER	129.96	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.75	DEG.	F	ALM
C	24	CONTROL PANEL	132.73	DEG.	F	ALM
C	25	RELAY AREA	126.65	DEG.	F	ALM
C	26	BATTERY LEFT	128.67	DEG.	F	ALM
C	27	BATTERY RIGHT	129.36	DEG.	F	ALM
C	28	AIR IN SET	122.87	DEG.	F	ALM
C	29	FUEL TANK	116.18	DEG.	F	ALM
C	30	FUEL OUTLET	149.18	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 13:55:06

STOPPED SINGLE SCAN 09 NOV 87 13:55:06

SECTION 11-11 GROUP 1 09 NOV 87 13:59:57
 30-11-11 GEN SET 5-11-11 3774

C	1	EXHAUST 1	749.44	DEG.	F	ALM
C	2	EXHAUST 2	779.51	DEG.	F	ALM
C	3	EXHAUST 3	809.58	DEG.	F	ALM
C	4	EXHAUST 4	783.51	DEG.	F	ALM
C	5	EXHAUST 5	776.16	DEG.	F	ALM
C	6	EXHAUST 6	765.67	DEG.	F	ALM
C	7	ENG. COOL. IN	201.27	DEG.	F	ALM
C	8	ENG. COOL. OUT	209.36	DEG.	F	ALM
C	9	OIL SUMP	234.56	DEG.	F	ALM
C	10	OIL GALLERY	237.41	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	130.07	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.84	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.38	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.37	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.85	DEG.	F	ALM
C	18	GEN. AIR IN	121.83	DEG.	F	ALM
C	19	GEN. AIR OUT	142.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.16	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.89	DEG.	F	ALM
C	22	GEN. EXCITER	129.74	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.43	DEG.	F	ALM
C	24	CONTROL PANEL	132.29	DEG.	F	ALM
C	25	RELAY AREA	126.68	DEG.	F	ALM
C	26	BATTERY LEFT	130.16	DEG.	F	ALM
C	27	BATTERY RIGHT	129.74	DEG.	F	ALM
C	28	AIR IN SET	123.20	DEG.	F	ALM
C	29	FUEL TANK	116.78	DEG.	F	ALM
C	30	FUEL OUTLET	149.92	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 14:00:07

STOPPED SINGLE SCAN 09 NOV 87 14:00:07

TEST DATA



ITEM 30 KW 60 Hz
GENERATOR SET
MODIFIED
 MFG. KIDBY WELDING
 MODEL NO. MEP 005A
 SERIAL NO. RZ 53774

National Technical Systems
 Scientific Services Group
 Testing Division
 PO Box 38
 Harwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. MIL-STD 705
 SHEET OF
 DATE 9 NOV 1987
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER G CARTER

HIGH TEMP OPERATION
710.1.3.2 (H)

INST TIME	STEP NO.	LOAD STEP	E60280 VOLTAGE			E60400 AMPERES x 40			E60300 KILOWATTS x 40			POWER FACTOR	FREQ. Hz	E61890 EXCITER FIELD		AMB. TEMP. °F	PRESS. IN. W/H
			L1- L0	L2- L0	L3- L0	L1- L0	L2- L0	L3- L0	L1- L0	L2- L0	L3- L0			VOLTS VDC	AMPS DCA		
1410		STARTED	119.5	120.5	120	2.51	2.55	2.55	2.51	2.55	2.51	.85	59.9	7.7	3.6	122	13.3
1420		R/L	119.5	120.5	120	2.51	2.55	2.55	2.51	2.55	2.51	.85	59.9	7.7	3.6	122	13.3
1430		R/L	119.5	120.5	120	2.51	2.55	2.55	2.51	2.55	2.51	.85	59.9	7.7	3.6	122	13.3
1440		R/L	119.5	120.5	120	2.51	2.55	2.55	2.51	2.55	2.51	.85	59.9	7.7	3.6	122	13.3
1441		SHUT UNIT															
1447		3 A TEMPE TO START	122	122	122	UNIT	- WOULD NOT		START	- STARTED ON BAT							
1455		N/L	122	122	122								61.9	3.7	1.4	121	15.0
1505		N/L	121	122	122								61.9	3.7	1.4	122	14.7
1514		SHUT UNIT				ZERO	GAGES FOR		GAGE INDICATING	TEST				END	OF	TEST	

SET FAILED TO START 3 TIMES - UNIT PLACED IN BATTLE SHOT AND SPARES WITH "NO LOAD"

NOTES:

B-166

HIGH TEMP OPERATION 710.1.2.2(4)

BEGIN SCAN GROUP 1 09 NOV 87 14:19:14
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	771.66	DEG.	F	ALM
2	EXHAUST 2	795.35	DEG.	F	ALM
3	EXHAUST 3	820.86	DEG.	F	ALM
4	EXHAUST 4	779.51	DEG.	F	ALM
5	EXHAUST 5	779.84	DEG.	F	ALM
6	EXHAUST 6	767.43	DEG.	F	ALM
7	ENG. COOL. IN	203.06	DEG.	F	ALM
8	ENG. COOL. OUT	211.21	DEG.	F	ALM
9	OIL SUMP	235.32	DEG.	F	ALM
10	OIL GALLERY	238.17	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	130.20	DEG.	F	ALM
14	RAD. TOP LEFT	147.66	DEG.	F	ALM
15	RAD. BTM LEFT	142.59	DEG.	F	ALM
16	RAD. TOP RIGHT	144.56	DEG.	F	ALM
17	RAD. BTM RIGHT	146.90	DEG.	F	ALM
18	GEN. AIR IN	120.63	DEG.	F	ALM
19	GEN. AIR OUT	142.69	DEG.	F	ALM
20	GEN. FRAME TOP	129.98	DEG.	F	ALM
21	GEN. FRAME BTM	124.78	DEG.	F	ALM
22	GEN. EXCITER	130.07	DEG.	F	ALM
23	GEN. VOLT. REG.	133.20	DEG.	F	ALM
24	CONTROL PANEL	132.11	DEG.	F	ALM
25	RELAY AREA	126.30	DEG.	F	ALM
26	BATTERY LEFT	132.30	DEG.	F	ALM
27	BATTERY RIGHT	131.65	DEG.	F	ALM
28	AIR IN SET	122.92	DEG.	F	ALM
29	FUEL TANK	118.61	DEG.	F	ALM
30	FUEL OUTLET	148.91	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 14:19:24

STOPPED SINGLE SCAN 09 NOV 87 14:19:24

BEGIN SCAN GROUP 1 09 NOV 87 14:29:52
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	770.67	DEG.	F	ALM
2	EXHAUST 2	795.69	DEG.	F	ALM
3	EXHAUST 3	822.94	DEG.	F	ALM
4	EXHAUST 4	779.22	DEG.	F	ALM
5	EXHAUST 5	781.63	DEG.	F	ALM
6	EXHAUST 6	772.48	DEG.	F	ALM
7	ENG. COOL. IN	202.96	DEG.	F	ALM
8	ENG. COOL. OUT	211.26	DEG.	F	ALM
9	OIL SUMP	235.58	DEG.	F	ALM
10	OIL GALLERY	238.46	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	130.21	DEG.	F	ALM
14	RAD. TOP LEFT	147.52	DEG.	F	ALM
15	RAD. BTM LEFT	142.52	DEG.	F	ALM
16	RAD. TOP RIGHT	144.75	DEG.	F	ALM
17	RAD. BTM RIGHT	147.31	DEG.	F	ALM
18	GEN. AIR IN	120.44	DEG.	F	ALM
19	GEN. AIR OUT	142.98	DEG.	F	ALM
20	GEN. FRAME TOP	129.98	DEG.	F	ALM
21	GEN. FRAME BTM	124.76	DEG.	F	ALM
22	GEN. EXCITER	129.56	DEG.	F	ALM
23	GEN. VOLT. REG.	133.10	DEG.	F	ALM
24	CONTROL PANEL	132.09	DEG.	F	ALM
25	RELAY AREA	126.19	DEG.	F	ALM
26	BATTERY LEFT	133.97	DEG.	F	ALM
27	BATTERY RIGHT	133.71	DEG.	F	ALM
28	AIR IN SET	122.51	DEG.	F	ALM
29	FUEL TANK	119.56	DEG.	F	ALM
30	FUEL OUTLET	149.32	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 14:30:02

STOPPED SINGLE SCAN 09 NOV 87 14:30:02

BEGIN SCAN GROUP 1 09 NOV 87 14:39:38
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	769.42	DEG.	F	ALM
2	EXHAUST 2	795.61	DEG.	F	ALM
3	EXHAUST 3	821.61	DEG.	F	ALM
4	EXHAUST 4	778.67	DEG.	F	ALM
5	EXHAUST 5	783.11	DEG.	F	ALM
6	EXHAUST 6	771.68	DEG.	F	ALM
7	ENG. COOL. IN	203.25	DEG.	F	ALM
8	ENG. COOL. OUT	211.46	DEG.	F	ALM
9	OIL SUMP	235.25	DEG.	F	ALM
10	OIL GALLERY	238.67	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	130.38	DEG.	F	ALM
14	RAD. TOP LEFT	147.93	DEG.	F	ALM
15	RAD. BTM LEFT	142.89	DEG.	F	ALM
16	RAD. TOP RIGHT	144.97	DEG.	F	ALM
17	RAD. BTM RIGHT	147.60	DEG.	F	ALM
18	GEN. AIR IN	120.91	DEG.	F	ALM
19	GEN. AIR OUT	143.48	DEG.	F	ALM
20	GEN. FRAME TOP	129.17	DEG.	F	ALM
21	GEN. FRAME BTM	124.98	DEG.	F	ALM
22	GEN. EXCITER	130.00	DEG.	F	ALM
23	GEN. VOLT. REG.	133.13	DEG.	F	ALM
24	CONTROL PANEL	132.13	DEG.	F	ALM
25	RELAY AREA	126.54	DEG.	F	ALM
26	BATTERY LEFT	134.97	DEG.	F	ALM
27	BATTERY RIGHT	135.04	DEG.	F	ALM
28	AIR IN SET	123.10	DEG.	F	ALM
29	FUEL TANK	120.35	DEG.	F	ALM
30	FUEL OUTLET	149.45	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 14:39:46

STOPPED SINGLE SCAN 09 NOV 87 14:39:46

BEGIN SCAN GROUP 1 09 NOV 87 14:55:00
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	337.61	DEG.	F	ALM
2	EXHAUST 2	327.11	DEG.	F	ALM
3	EXHAUST 3	311.78	DEG.	F	ALM
4	EXHAUST 4	360.69	DEG.	F	ALM
5	EXHAUST 5	365.10	DEG.	F	ALM
6	EXHAUST 6	358.18	DEG.	F	ALM
7	ENG. COOL. IN	173.67	DEG.	F	ALM
8	ENG. COOL. OUT	180.99	DEG.	F	ALM
9	OIL SUMP	220.11	DEG.	F	ALM
10	OIL GALLERY	222.99	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	125.73	DEG.	F	ALM
14	RAD. TOP LEFT	135.54	DEG.	F	ALM
15	RAD. BTM LEFT	135.11	DEG.	F	ALM
16	RAD. TOP RIGHT	137.19	DEG.	F	ALM
17	RAD. BTM RIGHT	130.36	DEG.	F	ALM
18	GEN. AIR IN	118.99	DEG.	F	ALM
19	GEN. AIR OUT	135.13	DEG.	F	ALM
20	GEN. FRAME TOP	127.31	DEG.	F	ALM
21	GEN. FRAME BTM	123.65	DEG.	F	ALM
22	GEN. EXCITER	126.85	DEG.	F	ALM
23	GEN. VOLT. REG.	133.27	DEG.	F	ALM
24	CONTROL PANEL	131.18	DEG.	F	ALM
25	RELAY AREA	123.83	DEG.	F	ALM
26	BATTERY LEFT	135.49	DEG.	F	ALM
27	BATTERY RIGHT	135.93	DEG.	F	ALM
28	AIR IN SET	121.06	DEG.	F	ALM
29	FUEL TANK	121.08	DEG.	F	ALM
30	FUEL OUTLET	151.03	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 87 14:55:10

STOPPED SINGLE SCAN 09 NOV 87 14:55:10

END SCAN GROUP 1 09 NOV 67 15:04:05
 STOPPED SINGLE SCAN 09 NOV 67 15:04:05

00	EXHAUST 1	334.64	DEG.	F	ALM
00	EXHAUST 2	330.64	DEG.	F	ALM
00	EXHAUST 3	315.91	DEG.	F	ALM
00	EXHAUST 4	335.91	DEG.	F	ALM
00	EXHAUST 5	360.61	DEG.	F	ALM
00	EXHAUST 6	347.87	DEG.	F	ALM
00	ENG. COOL. IN	170.30	DEG.	F	ALM
00	ENG. COOL. OUT	179.31	DEG.	F	ALM
00	OIL SUMP	213.90	DEG.	F	ALM
00	OIL GALLERY	216.55	DEG.	F	ALM
00		.00000			
00		.00000			
00	ENG. INTAKE	124.64	DEG.	F	ALM
00	RAD. TOP LEFT	133.81	DEG.	F	ALM
00	RAD. BTM LEFT	133.66	DEG.	F	ALM
00	RAD. TOP RIGHT	136.13	DEG.	F	ALM
00	RAD. BTM RIGHT	136.93	DEG.	F	ALM
00	GEN. AIR IN	120.35	DEG.	F	ALM
00	GEN. AIR OUT	132.96	DEG.	F	ALM
00	GEN. FRAME TOP	125.61	DEG.	F	ALM
00	GEN. FRAME BTM	122.97	DEG.	F	ALM
00	GEN. EXCITER	126.93	DEG.	F	ALM
00	GEN. VOLT. REG.	132.11	DEG.	F	ALM
00	CONTROL PANEL	130.87	DEG.	F	ALM
00	RELAY AREA	123.36	DEG.	F	ALM
00	BATTERY LEFT	135.40	DEG.	F	ALM
00	BATTERY RIGHT	136.90	DEG.	F	ALM
00	AIR IN SET	122.87	DEG.	F	ALM
00	FUEL TANK	121.45	DEG.	F	ALM
00	FUEL OUTLET	148.82	DEG.	F	ALM

END SCAN GROUP 1 09 NOV 67 15:04:15

STOPPED SINGLE SCAN 09 NOV 67 15:04:15

TEST DATA

ITEM 30 Kw 60Hz
 Gen Set
 MODIFIED
 MFCR. LIBBY WELDING
 MODEL NO. MEPO005A
 SERIAL NO. R25 5774

National Scientific Testing Division
 Technical Services PO Box 38
 Systems Group Harlow, Virginia 22471
 Tel: 703 752 5300

REF. NO. MIL-STD 705: 608.7
 SHEET 1 OF 2
 DATE 10 Nov 87
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER *ALMCC*

FREQUENCY AND VOLTAGE STABILITY TEST (LONG TERM)

INST TIME	LOAD STEP NO.	E60250 VOLTAGE			E60400 AMPERES			E62300 KILOWATTS			E61890		
		L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	POWER FACTOR	FREQ.	EXCITER FIELD
		VAC	VAC	VAC	AC AMPS	AC AMPS	AC AMPS	KW	KW	KW	PF	Hz	VOLTS VDC
0630	STARTED	120.0	120.0	120.0	2.48	2.48	2.48	2.48	2.48	2.48	0.80	60.2	8.8
0635	PLACED ON	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.5	2.48	0.80	60.0	9.2
0645	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.5	2.48	0.80	59.9	9.4
0655	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.8	9.5
0705	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.8	9.7
0715	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.7
0725	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0735	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0745	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0755	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0805	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0815	PERFORMED	121.0	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0825	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0835	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0845	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0855	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0905	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0915	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0925	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0935	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0945	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
0955	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1005	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1015	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1025	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1035	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1045	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1055	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1105	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1115	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1125	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1135	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1145	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1155	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1205	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1215	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1225	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1235	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1245	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8
1255	R/L	119.5	121.0	120.5	2.48	2.48	2.48	2.46	2.52	2.49	0.80	59.7	9.8

UNITS: FREQUENCY REGULATION

NOTES:

TEST DATA

ITEM 30KW 60Hz
GENERATOR SET
MOLIFIED
MPGR. LIBBY WELDING
MODEL NO. MEPO 005A
SERIAL NO. R253774



National Technical Systems
 Scientific Services Group
 PO. Box 38
 Harwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. 1 - STD 705; 608.2
 SHEET 2 OF 2
 DATE 10 NOV 1987
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER RT RM GC

FREQUENCY AND VOLTAGE STABILITY TEST (LONG TERM)

INST TIME	LOAD STEP NO.	E60280 VOLTAGE			E60400 AMPERES X 40			E62700 KILOWATTS X 40			E62420 POWER		E61890 EXCITER FIELD	AMB. TEMP. °F	PAGES
		L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC MPFS	L2-L0 AC MPFS	L3-L0 AC MPFS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw	FACTOR PF	HZ	VOLTS VDC	AMPS DCA	
1253	N/L	123	121	122								61.6	4.0	1.5	123
1253	PERFORM	123	121	122	NO LOAD	NO LOAD	STABILITY					61.6	4.0	1.5	122
1254	N/L	123	121	122								61.6	3.9	1.5	123
1255	START	123	121	122	AT NO LOAD	AT NO LOAD						61.5	4.0	1.5	124
1325	N/L	123	121	122								61.5	3.9	1.5	124
1365	N/L	123	121	122								61.5	3.9	1.5	124
1425	N/L	123	121	122								61.5	3.9	1.5	124
1465	N/L	123.1	121.1	122.1								61.5	3.9	1.5	125
1525	N/L	123.1	121.1	122.1								61.5	4.0	1.5	124
1535	N/L	123.1	121.1	122.1								61.5	3.8	1.5	123
1625	N/L	123.1	121.1	122.1								61.5	3.9	1.5	124
1655	N/L	123.1	121.1	122.1								59.4	3.1	3.5	124
1655	END	120	121.5	120.5	2.54	2.56	2.56	.25	.25	.252	.795	61.6	4.1	1.5	124
1700	R/L	123.5	121	122	2.54	2.56	2.56	.25	.25	.252	.795	59.4	4.0	1.5	124
	N/L	120	121.5	121	2.54	2.56	2.56	.25	.25	.252	.795	61.5	4.0	1.5	124
	R/L	123.5	121	122	2.54	2.56	2.56	.25	.25	.252	.795	59.4	4.0	1.5	124
	N/L	120	121.5	120.5	2.54	2.56	2.56	.25	.25	.252	.795	61.6	4.1	1.5	124
1705	N/L	123.5	121	122	2.54	2.56	2.56	.25	.25	.252	.795	59.4	4.0	1.5	124
1705	END OF TEST														
1706	SHUT DOWN UNIT														

TEST FAILURE - (SEE COMPARISON SHEET)

INTS:

TEST DATA

REF. NO. MIL-STD-705

SHEET 1 OF 1

DATE 11 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER G.S./K.M.

NTS

ITEM 30 KW 60 Hz

GENERATOR SET

MODIFIED

MFR. LIBBY WELCORING

MODEL NO. MEP 005A

SERIAL NO. R253224

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Haltwood, Virginia 22471FREQUENCY AND VOLTAGE Stability
Tel: 703 752 5300

(Long Term) Method 608.2

VOLTAGE

FREQUENCY

LOAD SET R/C N/C	MAXIMUM EXTENSION			CONSTANT LOAD		REGULATION		MAXIMUM EXTENSION		UNDESIRABLE		REC. TIME		CONSTANT LOAD	
	OVERSHOOT Hz	Hz	INERSHOOT Hz	Hz	MINIMUM Hz	FREQ. Hz	VOLT V	OVERSHOOT Hz	Hz	VOLT V	Hz	SEC.	SEC.	VOLT V	Hz
1															
1-2			1.35	2.26	.05	3.5	1.33			3.82	3.18	.23	.12	.15	
2-3	1.22	2.03			.09	3.66	1.25					.16	.17	.15	
3-4			1.38	2.22	.10	3.66	.83			3.30	2.75	.23	.17	.15	
4-5	1.01	1.68			.09	3.5	.83					.23	.21	.22	
5-6			1.29	2.14	.09	3.5	1.25			3.47	2.89	.23	.17	.15	
6-7	1.22	2.03			.16	3.66	1.25					.23	.17	.15	
7															

SHORT TERM LOAD CHANGES

FREQUENCY REGULATION EXCEEDED 2%

NOTES:

FREQUENCY/VOLTAGE STABILITY TEST 608.2 LONG TERM

BEGIN SCAN GROUP 1 10 NOV 87 06:45:27
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	755.96	DEG.	F	ALM
C	2	EXHAUST 2	778.76	DEG.	F	ALM
C	3	EXHAUST 3	800.00	DEG.	F	ALM
C	4	EXHAUST 4	779.66	DEG.	F	ALM
C	5	EXHAUST 5	771.96	DEG.	F	ALM
C	6	EXHAUST 6	762.01	DEG.	F	ALM
C	7	ENG. COOL. IN	189.33	DEG.	F	ALM
C	8	ENG. COOL. OUT	197.17	DEG.	F	ALM
C	9	OIL SUMP	192.81	DEG.	F	ALM
C	10	OIL GALLERY	194.42	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.94	DEG.	F	ALM
C	14	RAD. TOP LEFT	141.29	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.20	DEG.	F	ALM
C	16	RAD. TOP RIGHT	132.92	DEG.	F	ALM
C	17	RAD. BTM RIGHT	136.93	DEG.	F	ALM
C	18	GEN. AIR IN	121.63	DEG.	F	ALM
C	19	GEN. AIR OUT	127.06	DEG.	F	ALM
C	20	GEN. FRAME TOP	117.93	DEG.	F	ALM
C	21	GEN. FRAME BTM	113.93	DEG.	F	ALM
C	22	GEN. EXCITER	126.23	DEG.	F	ALM
C	23	GEN. VOLT. REG.	108.46	DEG.	F	ALM
C	24	CONTROL PANEL	114.50	DEG.	F	ALM
C	25	RELAY AREA	122.18	DEG.	F	ALM
C	26	BATTERY LEFT	101.47	DEG.	F	ALM
C	27	BATTERY RIGHT	103.72	DEG.	F	ALM
C	28	AIR IN SET	123.55	DEG.	F	ALM
C	29	FUEL TANK	89.944	DEG.	F	ALM
C	30	FUEL OUTLET	117.10	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 06:45:38

STOPPED SINGLE SCAN 10 NOV 87 06:45:38

BEGIN SCAN GROUP 1 10 NOV 87 06:55:07
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	760.95	DEG.	F	ALM
C	2	EXHAUST 2	782.60	DEG.	F	ALM
C	3	EXHAUST 3	810.04	DEG.	F	ALM
C	4	EXHAUST 4	785.93	DEG.	F	ALM
C	5	EXHAUST 5	773.58	DEG.	F	ALM
C	6	EXHAUST 6	766.13	DEG.	F	ALM
C	7	ENG. COOL. IN	196.95	DEG.	F	ALM
C	8	ENG. COOL. OUT	204.00	DEG.	F	ALM
C	9	OIL SUMP	215.54	DEG.	F	ALM
C	10	OIL GALLERY	216.81	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.49	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.21	DEG.	F	ALM
C	15	RAD. BTM LEFT	148.09	DEG.	F	ALM
C	16	RAD. TOP RIGHT	139.42	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.07	DEG.	F	ALM
C	18	GEN. AIR IN	123.96	DEG.	F	ALM
C	19	GEN. AIR OUT	134.61	DEG.	F	ALM
C	20	GEN. FRAME TOP	125.07	DEG.	F	ALM
C	21	GEN. FRAME BTM	121.26	DEG.	F	ALM
C	22	GEN. EXCITER	130.19	DEG.	F	ALM
C	23	GEN. VOLT. REG.	116.19	DEG.	F	ALM
C	24	CONTROL PANEL	123.73	DEG.	F	ALM
C	25	RELAY AREA	126.42	DEG.	F	ALM
C	26	BATTERY LEFT	105.98	DEG.	F	ALM
C	27	BATTERY RIGHT	105.75	DEG.	F	ALM
C	28	AIR IN SET	126.05	DEG.	F	ALM
C	29	FUEL TANK	90.898	DEG.	F	ALM
C	30	FUEL OUTLET	133.18	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 06:55:17

STOPPED SINGLE SCAN 10 NOV 87 06:55:17

BEGIN SCAN GROUP 1 10 NOV 87 07:04:10
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	765.31	DEG.	F	ALM
C	2	EXHAUST 2	787.84	DEG.	F	ALM
C	3	EXHAUST 3	815.50	DEG.	F	ALM
C	4	EXHAUST 4	787.49	DEG.	F	ALM
C	5	EXHAUST 5	775.02	DEG.	F	ALM
C	6	EXHAUST 6	768.22	DEG.	F	ALM
C	7	ENG. COOL. IN	200.81	DEG.	F	ALM
C	8	ENG. COOL. OUT	208.77	DEG.	F	ALM
C	9	OIL SUMP	225.38	DEG.	F	ALM
C	10	OIL GALLERY	227.19	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.96	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.79	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.12	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.98	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.69	DEG.	F	ALM
C	18	GEN. AIR IN	125.20	DEG.	F	ALM
C	19	GEN. AIR OUT	139.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	128.61	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.78	DEG.	F	ALM
C	22	GEN. EXCITER	131.91	DEG.	F	ALM
C	23	GEN. VOLT. REG.	120.89	DEG.	F	ALM
C	24	CONTROL PANEL	128.00	DEG.	F	ALM
C	25	RELAY AREA	128.76	DEG.	F	ALM
C	26	BATTERY LEFT	109.31	DEG.	F	ALM
C	27	BATTERY RIGHT	108.14	DEG.	F	ALM
C	28	AIR IN SET	127.15	DEG.	F	ALM
C	29	FUEL TANK	92.313	DEG.	F	ALM
C	30	FUEL OUTLET	139.79	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:04:16

STOPPED SINGLE SCAN 10 NOV 87 07:04:16

BEGIN SCAN GROUP 1 10 NOV 87 07:14:46
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	764.52	DEG.	F	ALM
C	2	EXHAUST 2	786.68	DEG.	F	ALM
C	3	EXHAUST 3	812.54	DEG.	F	ALM
C	4	EXHAUST 4	781.86	DEG.	F	ALM
C	5	EXHAUST 5	774.09	DEG.	F	ALM
C	6	EXHAUST 6	763.63	DEG.	F	ALM
C	7	ENG. COOL. IN	201.70	DEG.	F	ALM
C	8	ENG. COOL. OUT	209.94	DEG.	F	ALM
C	9	OIL SUMP	231.50	DEG.	F	ALM
C	10	OIL GALLERY	233.26	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.43	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.82	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.72	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.42	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.84	DEG.	F	ALM
C	18	GEN. AIR IN	122.51	DEG.	F	ALM
C	19	GEN. AIR OUT	140.59	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.36	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.44	DEG.	F	ALM
C	22	GEN. EXCITER	131.08	DEG.	F	ALM
C	23	GEN. VOLT. REG.	124.41	DEG.	F	ALM
C	24	CONTROL PANEL	130.50	DEG.	F	ALM
C	25	RELAY AREA	127.71	DEG.	F	ALM
C	26	BATTERY LEFT	112.23	DEG.	F	ALM
C	27	BATTERY RIGHT	110.37	DEG.	F	ALM
C	28	AIR IN SET	124.56	DEG.	F	ALM
C	29	FUEL TANK	94.386	DEG.	F	ALM
C	30	FUEL OUTLET	145.42	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:14:57

STOPPED SINGLE SCAN 10 NOV 87 07:14:57

BEGIN SCAN GROUP 1 10 NOV 87 07:24:28
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	765.85	DEG.	F	ALM
C	2	EXHAUST 2	786.87	DEG.	F	ALM
C	3	EXHAUST 3	813.69	DEG.	F	ALM
C	4	EXHAUST 4	775.25	DEG.	F	ALM
C	5	EXHAUST 5	772.19	DEG.	F	ALM
C	6	EXHAUST 6	763.82	DEG.	F	ALM
C	7	ENG. COOL. IN	282.86	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.28	DEG.	F	ALM
C	9	OIL SUMP	233.79	DEG.	F	ALM
C	10	OIL GALLERY	235.46	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.53	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.26	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.82	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.18	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.32	DEG.	F	ALM
C	18	GEN. AIR IN	122.79	DEG.	F	ALM
C	19	GEN. AIR OUT	142.28	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.98	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.49	DEG.	F	ALM
C	22	GEN. EXCITER	131.12	DEG.	F	ALM
C	23	GEN. VOLT. REG.	126.37	DEG.	F	ALM
C	24	CONTROL PANEL	131.17	DEG.	F	ALM
C	25	RELAY AREA	127.86	DEG.	F	ALM
C	26	BATTERY LEFT	114.79	DEG.	F	ALM
C	27	BATTERY RIGHT	112.78	DEG.	F	ALM
C	28	AIR IN SET	124.27	DEG.	F	ALM
C	29	FUEL TANK	96.318	DEG.	F	ALM
C	30	FUEL OUTLET	147.37	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:24:38

STOPPED SINGLE SCAN 10 NOV 87 07:24:38

BEGIN SCAN GROUP 1 10 NOV 87 07:35:14
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	767.85	DEG.	F	ALM
C	2	EXHAUST 2	798.28	DEG.	F	ALM
C	3	EXHAUST 3	812.58	DEG.	F	ALM
C	4	EXHAUST 4	774.89	DEG.	F	ALM
C	5	EXHAUST 5	773.76	DEG.	F	ALM
C	6	EXHAUST 6	761.98	DEG.	F	ALM
C	7	ENG. COOL. IN	282.62	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.65	DEG.	F	ALM
C	9	OIL SUMP	234.97	DEG.	F	ALM
C	10	OIL GALLERY	236.64	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.64	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.72	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.58	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.87	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.91	DEG.	F	ALM
C	18	GEN. AIR IN	122.92	DEG.	F	ALM
C	19	GEN. AIR OUT	143.46	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.29	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.88	DEG.	F	ALM
C	22	GEN. EXCITER	131.16	DEG.	F	ALM
C	23	GEN. VOLT. REG.	128.12	DEG.	F	ALM
C	24	CONTROL PANEL	131.92	DEG.	F	ALM
C	25	RELAY AREA	128.22	DEG.	F	ALM
C	26	BATTERY LEFT	116.88	DEG.	F	ALM
C	27	BATTERY RIGHT	115.81	DEG.	F	ALM
C	28	AIR IN SET	125.12	DEG.	F	ALM
C	29	FUEL TANK	98.487	DEG.	F	ALM
C	30	FUEL OUTLET	148.46	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:35:24

STOPPED SINGLE SCAN 10 NOV 87 07:35:24

BEGIN SCAN GROUP 1 10 NOV 87 07:44:51
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	767.36	DEG.	F	ALM
C	2	EXHAUST 2	788.42	DEG.	F	ALM
C	3	EXHAUST 3	814.17	DEG.	F	ALM
C	4	EXHAUST 4	772.77	DEG.	F	ALM
C	5	EXHAUST 5	772.11	DEG.	F	ALM
C	6	EXHAUST 6	764.88	DEG.	F	ALM
C	7	ENG. COOL. IN	283.81	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.88	DEG.	F	ALM
C	9	OIL SUMP	235.77	DEG.	F	ALM
C	10	OIL GALLERY	237.43	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.82	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.38	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.38	DEG.	F	ALM
C	18	GEN. AIR IN	122.68	DEG.	F	ALM
C	19	GEN. AIR OUT	143.88	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.65	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.46	DEG.	F	ALM
C	22	GEN. EXCITER	131.35	DEG.	F	ALM
C	23	GEN. VOLT. REG.	129.43	DEG.	F	ALM
C	24	CONTROL PANEL	132.42	DEG.	F	ALM
C	25	RELAY AREA	128.39	DEG.	F	ALM
C	26	BATTERY LEFT	118.18	DEG.	F	ALM
C	27	BATTERY RIGHT	117.17	DEG.	F	ALM
C	28	AIR IN SET	124.61	DEG.	F	ALM
C	29	FUEL TANK	108.34	DEG.	F	ALM
C	30	FUEL OUTLET	149.43	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:45:05

STOPPED SINGLE SCAN 10 NOV 87 07:45:05

BEGIN SCAN GROUP 1 10 NOV 87 07:55:35
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	769.98	DEG.	F	ALM
C	2	EXHAUST 2	791.26	DEG.	F	ALM
C	3	EXHAUST 3	815.94	DEG.	F	ALM
C	4	EXHAUST 4	773.78	DEG.	F	ALM
C	5	EXHAUST 5	777.16	DEG.	F	ALM
C	6	EXHAUST 6	769.13	DEG.	F	ALM
C	7	ENG. COOL. IN	283.65	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.98	DEG.	F	ALM
C	9	OIL SUMP	236.37	DEG.	F	ALM
C	10	OIL GALLERY	238.88	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.35	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.44	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.99	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.88	DEG.	F	ALM
C	18	GEN. AIR IN	122.55	DEG.	F	ALM
C	19	GEN. AIR OUT	144.56	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.98	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.89	DEG.	F	ALM
C	22	GEN. EXCITER	131.81	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.77	DEG.	F	ALM
C	24	CONTROL PANEL	133.18	DEG.	F	ALM
C	25	RELAY AREA	128.82	DEG.	F	ALM
C	26	BATTERY LEFT	128.15	DEG.	F	ALM
C	27	BATTERY RIGHT	119.16	DEG.	F	ALM
C	28	AIR IN SET	124.78	DEG.	F	ALM
C	29	FUEL TANK	102.38	DEG.	F	ALM
C	30	FUEL OUTLET	148.71	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:55:45

STOPPED SINGLE SCAN 10 NOV 87 07:55:45

BEGIN SCAN GROUP 1 10 NOV 87 08:04:17
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	772.71	DEG.	F	ALM
C	2	EXHAUST 2	792.25	DEG.	F	ALM
C	3	EXHAUST 3	815.87	DEG.	F	ALM
C	4	EXHAUST 4	774.13	DEG.	F	ALM
C	5	EXHAUST 5	775.79	DEG.	F	ALM
C	6	EXHAUST 6	768.31	DEG.	F	ALM
C	7	ENG. COOL. IN	284.27	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.44	DEG.	F	ALM
C	9	OIL SUMP	236.81	DEG.	F	ALM
C	10	OIL GALLERY	238.53	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.43	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.72	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.83	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.41	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.24	DEG.	F	ALM
C	18	GEN. AIR IN	123.44	DEG.	F	ALM
C	19	GEN. AIR OUT	145.43	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.42	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.22	DEG.	F	ALM
C	22	GEN. EXCITER	132.15	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.69	DEG.	F	ALM
C	24	CONTROL PANEL	133.63	DEG.	F	ALM
C	25	RELAY AREA	128.95	DEG.	F	ALM
C	26	BATTERY LEFT	121.13	DEG.	F	ALM
C	27	BATTERY RIGHT	128.47	DEG.	F	ALM
C	28	AIR IN SET	125.88	DEG.	F	ALM
C	29	FUEL TANK	183.93	DEG.	F	ALM
C	30	FUEL OUTLET	149.31	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 08:04:27

STOPPED SINGLE SCAN 10 NOV 87 08:04:27

BEGIN SCAN GROUP 1 10 NOV 87 08:40:17
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	765.68	DEG.	F	ALM
C	2	EXHAUST 2	798.88	DEG.	F	ALM
C	3	EXHAUST 3	812.46	DEG.	F	ALM
C	4	EXHAUST 4	771.83	DEG.	F	ALM
C	5	EXHAUST 5	778.37	DEG.	F	ALM
C	6	EXHAUST 6	765.47	DEG.	F	ALM
C	7	ENG. COOL. IN	283.24	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.38	DEG.	F	ALM
C	9	OIL SUMP	236.75	DEG.	F	ALM
C	10	OIL GALLERY	238.41	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.63	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.65	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.57	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.24	DEG.	F	ALM
C	18	GEN. AIR IN	121.38	DEG.	F	ALM
C	19	GEN. AIR OUT	144.71	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.34	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.38	DEG.	F	ALM
C	22	GEN. EXCITER	138.73	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.11	DEG.	F	ALM
C	24	CONTROL PANEL	133.33	DEG.	F	ALM
C	25	RELAY AREA	127.54	DEG.	F	ALM
C	26	BATTERY LEFT	126.49	DEG.	F	ALM
C	27	BATTERY RIGHT	126.37	DEG.	F	ALM
C	28	AIR IN SET	123.46	DEG.	F	ALM
C	29	FUEL TANK	189.81	DEG.	F	ALM
C	30	FUEL OUTLET	158.22	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 08:40:27

STOPPED SINGLE SCAN 10 NOV 87 08:40:27

BEGIN SCAN GROUP 1 10 NOV 87 09:09:09
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	765.87	DEG.	F	ALM
C	2	EXHAUST 2	798.86	DEG.	F	ALM
C	3	EXHAUST 3	814.57	DEG.	F	ALM
C	4	EXHAUST 4	778.38	DEG.	F	ALM
C	5	EXHAUST 5	772.65	DEG.	F	ALM
C	6	EXHAUST 6	764.18	DEG.	F	ALM
C	7	ENG. COOL. IN	283.18	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.27	DEG.	F	ALM
C	9	OIL SUMP	236.47	DEG.	F	ALM
C	10	OIL GALLERY	238.11	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.89	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.36	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.66	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.24	DEG.	F	ALM
C	18	GEN. AIR IN	122.23	DEG.	F	ALM
C	19	GEN. AIR OUT	144.73	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.81	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.88	DEG.	F	ALM
C	22	GEN. EXCITER	138.77	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.49	DEG.	F	ALM
C	24	CONTROL PANEL	133.12	DEG.	F	ALM
C	25	RELAY AREA	127.68	DEG.	F	ALM
C	26	BATTERY LEFT	138.36	DEG.	F	ALM
C	27	BATTERY RIGHT	129.53	DEG.	F	ALM
C	28	AIR IN SET	124.87	DEG.	F	ALM
C	29	FUEL TANK	113.69	DEG.	F	ALM
C	30	FUEL OUTLET	158.83	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 09:09:19

STOPPED SINGLE SCAN 10 NOV 87 09:09:19

BEGIN SCAN GROUP 1 10 NOV 87 09:39:54
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	768.96	DEG.	F	ALM
C	2	EXHAUST 2	793.39	DEG.	F	ALM
C	3	EXHAUST 3	818.53	DEG.	F	ALM
C	4	EXHAUST 4	778.22	DEG.	F	ALM
C	5	EXHAUST 5	777.11	DEG.	F	ALM
C	6	EXHAUST 6	763.81	DEG.	F	ALM
C	7	ENG. COOL. IN	284.46	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.57	DEG.	F	ALM
C	9	OIL SUMP	236.88	DEG.	F	ALM
C	10	OIL GALLERY	238.44	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.63	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.92	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.83	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.82	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.92	DEG.	F	ALM
C	18	GEN. AIR IN	123.67	DEG.	F	ALM
C	19	GEN. AIR OUT	145.98	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.54	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.33	DEG.	F	ALM
C	22	GEN. EXCITER	132.58	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.23	DEG.	F	ALM
C	24	CONTROL PANEL	133.91	DEG.	F	ALM
C	25	RELAY AREA	129.33	DEG.	F	ALM
C	26	BATTERY LEFT	133.89	DEG.	F	ALM
C	27	BATTERY RIGHT	133.57	DEG.	F	ALM
C	28	AIR IN SET	125.58	DEG.	F	ALM
C	29	FUEL TANK	117.41	DEG.	F	ALM
C	30	FUEL OUTLET	151.66	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 09:48:04

STOPPED SINGLE SCAN 10 NOV 87 09:48:04

BEGIN SCAN GROUP 1 10 NOV 87 10:09:29
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	764.75	DEG.	F	ALM
C	2	EXHAUST 2	789.57	DEG.	F	ALM
C	3	EXHAUST 3	813.49	DEG.	F	ALM
C	4	EXHAUST 4	768.48	DEG.	F	ALM
C	5	EXHAUST 5	774.67	DEG.	F	ALM
C	6	EXHAUST 6	761.82	DEG.	F	ALM
C	7	ENG. COOL. IN	283.49	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.59	DEG.	F	ALM
C	9	OIL SUMP	236.88	DEG.	F	ALM
C	10	OIL GALLERY	238.58	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	131.88	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.57	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.96	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.25	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.71	DEG.	F	ALM
C	18	GEN. AIR IN	121.59	DEG.	F	ALM
C	19	GEN. AIR OUT	144.79	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.49	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.29	DEG.	F	ALM
C	22	GEN. EXCITER	131.17	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.38	DEG.	F	ALM
C	24	CONTROL PANEL	133.67	DEG.	F	ALM
C	25	RELAY AREA	127.84	DEG.	F	ALM
C	26	BATTERY LEFT	137.27	DEG.	F	ALM
C	27	BATTERY RIGHT	136.74	DEG.	F	ALM
C	28	AIR IN SET	123.38	DEG.	F	ALM
C	29	FUEL TANK	128.68	DEG.	F	ALM
C	30	FUEL OUTLET	151.66	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 10:09:39

STOPPED SINGLE SCAN 10 NOV 87 10:09:39

BEGIN SCAN GROUP 1 10 NOV 87 10:39:56
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	771.26	DEG.	F	ALM
C	2	EXHAUST 2	796.68	DEG.	F	ALM
C	3	EXHAUST 3	818.81	DEG.	F	ALM
C	4	EXHAUST 4	773.72	DEG.	F	ALM
C	5	EXHAUST 5	779.81	DEG.	F	ALM
C	6	EXHAUST 6	769.82	DEG.	F	ALM
C	7	ENG. COOL. IN	284.19	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.37	DEG.	F	ALM
C	9	OIL SUMP	237.82	DEG.	F	ALM
C	10	OIL GALLERY	238.69	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	131.69	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.19	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.43	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.68	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.28	DEG.	F	ALM
C	18	GEN. AIR IN	122.86	DEG.	F	ALM
C	19	GEN. AIR OUT	145.28	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.11	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.83	DEG.	F	ALM
C	22	GEN. EXCITER	131.62	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.41	DEG.	F	ALM
C	24	CONTROL PANEL	133.73	DEG.	F	ALM
C	25	RELAY AREA	128.39	DEG.	F	ALM
C	26	BATTERY LEFT	148.36	DEG.	F	ALM
C	27	BATTERY RIGHT	148.97	DEG.	F	ALM
C	28	AIR IN SET	124.69	DEG.	F	ALM
C	29	FUEL TANK	123.34	DEG.	F	ALM
C	30	FUEL OUTLET	152.68	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 10:40:06

STOPPED SINGLE SCAN 10 NOV 87 10:40:06

BEGIN SCAN GROUP 1 10 NOV 87 11:10:15
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	773.81	DEG.	F	ALM
C	2	EXHAUST 2	797.73	DEG.	F	ALM
C	3	EXHAUST 3	817.72	DEG.	F	ALM
C	4	EXHAUST 4	774.83	DEG.	F	ALM
C	5	EXHAUST 5	777.89	DEG.	F	ALM
C	6	EXHAUST 6	767.62	DEG.	F	ALM
C	7	ENG. COOL. IN	285.36	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.55	DEG.	F	ALM
C	9	OIL SUMP	238.21	DEG.	F	ALM
C	10	OIL GALLERY	239.88	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	132.34	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.83	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.34	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.73	DEG.	F	ALM
C	17	RAD. BTM RIGHT	158.18	DEG.	F	ALM
C	18	GEN. AIR IN	123.35	DEG.	F	ALM
C	19	GEN. AIR OUT	146.66	DEG.	F	ALM
C	20	GEN. FRAME TOP	132.41	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.99	DEG.	F	ALM
C	22	GEN. EXCITER	132.36	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.43	DEG.	F	ALM
C	24	CONTROL PANEL	135.82	DEG.	F	ALM
C	25	RELAY AREA	129.48	DEG.	F	ALM
C	26	BATTERY LEFT	143.67	DEG.	F	ALM
C	27	BATTERY RIGHT	145.28	DEG.	F	ALM
C	28	AIR IN SET	125.43	DEG.	F	ALM
C	29	FUEL TANK	125.55	DEG.	F	ALM
C	30	FUEL OUTLET	153.68	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 11:10:25

STOPPED SINGLE SCAN 10 NOV 87 11:10:25

BEGIN SCAN GROUP 1 10 NOV 87 11:39:54
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	767.84	DEG.	F	ALM
C	2	EXHAUST 2	795.28	DEG.	F	ALM
C	3	EXHAUST 3	815.58	DEG.	F	ALM
C	4	EXHAUST 4	778.88	DEG.	F	ALM
C	5	EXHAUST 5	778.35	DEG.	F	ALM
C	6	EXHAUST 6	769.51	DEG.	F	ALM
C	7	ENG. COOL. IN	283.88	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.62	DEG.	F	ALM
C	9	OIL SUMP	236.78	DEG.	F	ALM
C	10	OIL GALLERY	238.53	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	138.87	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.56	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.16	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.24	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.88	DEG.	F	ALM
C	18	GEN. AIR IN	122.12	DEG.	F	ALM
C	19	GEN. AIR OUT	145.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.51	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.88	DEG.	F	ALM
C	22	GEN. EXCITER	138.95	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.53	DEG.	F	ALM
C	24	CONTROL PANEL	133.45	DEG.	F	ALM
C	25	RELAY AREA	127.91	DEG.	F	ALM
C	26	BATTERY LEFT	145.98	DEG.	F	ALM
C	27	BATTERY RIGHT	147.41	DEG.	F	ALM
C	28	AIR IN SET	124.56	DEG.	F	ALM
C	29	FUEL TANK	127.18	DEG.	F	ALM
C	30	FUEL OUTLET	152.28	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 11:40:04

STOPPED SINGLE SCAN 10 NOV 87 11:40:04

BEGIN SCAN GROUP 1 10 NOV 87 12:09:45
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	771.66	DEG.	F	ALM
C	2	EXHAUST 2	797.08	DEG.	F	ALM
C	3	EXHAUST 3	817.96	DEG.	F	ALM
C	4	EXHAUST 4	776.23	DEG.	F	ALM
C	5	EXHAUST 5	785.82	DEG.	F	ALM
C	6	EXHAUST 6	774.47	DEG.	F	ALM
C	7	ENG. COOL. IN	265.43	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.59	DEG.	F	ALM
C	9	OIL SUMP	237.33	DEG.	F	ALM
C	10	OIL GALLERY	239.18	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.75	DEG.	F	ALM
C	14	RAD. TOP LEFT	158.52	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.94	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.85	DEG.	F	ALM
C	17	RAD. BTM RIGHT	158.49	DEG.	F	ALM
C	18	GEN. AIR IN	124.47	DEG.	F	ALM
C	19	GEN. AIR OUT	146.96	DEG.	F	ALM
C	20	GEN. FRAME TOP	132.15	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.78	DEG.	F	ALM
C	22	GEN. EXCITER	132.73	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.86	DEG.	F	ALM
C	24	CONTROL PANEL	134.43	DEG.	F	ALM
C	25	RELAY AREA	129.92	DEG.	F	ALM
C	26	BATTERY LEFT	148.38	DEG.	F	ALM
C	27	BATTERY RIGHT	149.86	DEG.	F	ALM
C	28	AIR IN SET	126.76	DEG.	F	ALM
C	29	FUEL TANK	128.46	DEG.	F	ALM
C	30	FUEL OUTLET	152.64	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:09:55

STOPPED SINGLE SCAN 10 NOV 87 12:09:55

BEGIN SCAN GROUP 1 10 NOV 87 12:21:29
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	327.19	DEG.	F	ALM
C	2	EXHAUST 2	327.89	DEG.	F	ALM
C	3	EXHAUST 3	318.22	DEG.	F	ALM
C	4	EXHAUST 4	363.94	DEG.	F	ALM
C	5	EXHAUST 5	372.36	DEG.	F	ALM
C	6	EXHAUST 6	357.55	DEG.	F	ALM
C	7	ENG. COOL. IN	175.33	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.99	DEG.	F	ALM
C	9	OIL SUMP	225.12	DEG.	F	ALM
C	10	OIL GALLERY	226.29	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.38	DEG.	F	ALM
C	14	RAD. TOP LEFT	138.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.65	DEG.	F	ALM
C	16	RAD. TOP RIGHT	139.91	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.83	DEG.	F	ALM
C	18	GEN. AIR IN	122.68	DEG.	F	ALM
C	19	GEN. AIR OUT	138.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.89	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.75	DEG.	F	ALM
C	22	GEN. EXCITER	129.58	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.84	DEG.	F	ALM
C	24	CONTROL PANEL	133.87	DEG.	F	ALM
C	25	RELAY AREA	126.19	DEG.	F	ALM
C	26	BATTERY LEFT	148.45	DEG.	F	ALM
C	27	BATTERY RIGHT	158.55	DEG.	F	ALM
C	28	AIR IN SET	124.88	DEG.	F	ALM
C	29	FUEL TANK	128.68	DEG.	F	ALM
C	30	FUEL OUTLET	152.88	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:21:39

STOPPED SINGLE SCAN 10 NOV 87 12:21:39

BEGIN SCAN GROUP 1 10 NOV 87 12:31:36
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	333.55	DEG.	F	ALM
C	2	EXHAUST 2	332.73	DEG.	F	ALM
C	3	EXHAUST 3	322.72	DEG.	F	ALM
C	4	EXHAUST 4	356.01	DEG.	F	ALM
C	5	EXHAUST 5	365.26	DEG.	F	ALM
C	6	EXHAUST 6	348.98	DEG.	F	ALM
C	7	ENG. COOL. IN	171.99	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.23	DEG.	F	ALM
C	9	OIL SUMP	216.93	DEG.	F	ALM
C	10	OIL GALLERY	218.82	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.85	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.63	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.47	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.71	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.78	DEG.	F	ALM
C	18	GEN. AIR IN	121.59	DEG.	F	ALM
C	19	GEN. AIR OUT	134.74	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.53	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.74	DEG.	F	ALM
C	22	GEN. EXCITER	129.45	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.81	DEG.	F	ALM
C	24	CONTROL PANEL	132.17	DEG.	F	ALM
C	25	RELAY AREA	125.36	DEG.	F	ALM
C	26	BATTERY LEFT	148.48	DEG.	F	ALM
C	27	BATTERY RIGHT	158.61	DEG.	F	ALM
C	28	AIR IN SET	123.57	DEG.	F	ALM
C	29	FUEL TANK	128.74	DEG.	F	ALM
C	30	FUEL OUTLET	158.94	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:31:46

STOPPED SINGLE SCAN 10 NOV 87 12:31:46

BEGIN SCAN GROUP 1 10 NOV 87 12:48:46
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	325.42	DEG.	F	ALM
C	2	EXHAUST 2	338.36	DEG.	F	ALM
C	3	EXHAUST 3	328.85	DEG.	F	ALM
C	4	EXHAUST 4	358.25	DEG.	F	ALM
C	5	EXHAUST 5	365.96	DEG.	F	ALM
C	6	EXHAUST 6	348.87	DEG.	F	ALM
C	7	ENG. COOL. IN	178.92	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.65	DEG.	F	ALM
C	9	OIL SUMP	214.89	DEG.	F	ALM
C	10	OIL GALLERY	214.56	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.41	DEG.	F	ALM
C	14	RAD. TOP LEFT	134.98	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.74	DEG.	F	ALM
C	16	RAD. TOP RIGHT	136.79	DEG.	F	ALM
C	17	RAD. BTM RIGHT	137.54	DEG.	F	ALM
C	18	GEN. AIR IN	121.91	DEG.	F	ALM
C	19	GEN. AIR OUT	132.88	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.38	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.28	DEG.	F	ALM
C	22	GEN. EXCITER	128.95	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.23	DEG.	F	ALM
C	24	CONTROL PANEL	131.43	DEG.	F	ALM
C	25	RELAY AREA	124.98	DEG.	F	ALM
C	26	BATTERY LEFT	148.44	DEG.	F	ALM
C	27	BATTERY RIGHT	151.32	DEG.	F	ALM
C	28	AIR IN SET	123.88	DEG.	F	ALM
C	29	FUEL TANK	128.59	DEG.	F	ALM
C	30	FUEL OUTLET	148.96	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:48:56

STOPPED SINGLE SCAN 10 NOV 87 12:48:56

BEGIN SCAN GROUP 1 10 NOV 87 12:50:47
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	327.24	DEG.	F	ALM
C	2	EXHAUST 2	331.84	DEG.	F	ALM
C	3	EXHAUST 3	321.26	DEG.	F	ALM
C	4	EXHAUST 4	368.93	DEG.	F	ALM
C	5	EXHAUST 5	369.48	DEG.	F	ALM
C	6	EXHAUST 6	349.66	DEG.	F	ALM
C	7	ENG. COOL. IN	172.39	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.18	DEG.	F	ALM
C	9	OIL SUMP	213.36	DEG.	F	ALM
C	10	OIL GALLERY	213.55	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.33	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.98	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.75	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.98	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.86	DEG.	F	ALM
C	18	GEN. AIR IN	121.95	DEG.	F	ALM
C	19	GEN. AIR OUT	132.75	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.86	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.86	DEG.	F	ALM
C	22	GEN. EXCITER	138.64	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.68	DEG.	F	ALM
C	24	CONTROL PANEL	132.46	DEG.	F	ALM
C	25	RELAY AREA	126.33	DEG.	F	ALM
C	26	BATTERY LEFT	148.56	DEG.	F	ALM
C	27	BATTERY RIGHT	151.32	DEG.	F	ALM
C	28	AIR IN SET	123.65	DEG.	F	ALM
C	29	FUEL TANK	128.52	DEG.	F	ALM
C	30	FUEL OUTLET	148.77	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:50:57

STOPPED SINGLE SCAN 10 NOV 87 12:50:57

BEGIN SCAN GROUP 1 10 NOV 87 13:54:16
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	333.18	DEG.	F	ALM
C	2	EXHAUST 2	337.22	DEG.	F	ALM
C	3	EXHAUST 3	326.11	DEG.	F	ALM
C	4	EXHAUST 4	355.86	DEG.	F	ALM
C	5	EXHAUST 5	365.58	DEG.	F	ALM
C	6	EXHAUST 6	345.83	DEG.	F	ALM
C	7	ENG. COOL. IN	171.69	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.01	DEG.	F	ALM
C	9	OIL SUMP	212.17	DEG.	F	ALM
C	10	OIL GALLERY	212.23	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.43	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.85	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.39	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.44	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.28	DEG.	F	ALM
C	18	GEN. AIR IN	123.83	DEG.	F	ALM
C	19	GEN. AIR OUT	138.74	DEG.	F	ALM
C	20	GEN. FRAME TOP	125.96	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.25	DEG.	F	ALM
C	22	GEN. EXCITER	129.85	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.63	DEG.	F	ALM
C	24	CONTROL PANEL	131.16	DEG.	F	ALM
C	25	RELAY AREA	125.98	DEG.	F	ALM
C	26	BATTERY LEFT	148.79	DEG.	F	ALM
C	27	BATTERY RIGHT	153.18	DEG.	F	ALM
C	28	AIR IN SET	124.18	DEG.	F	ALM
C	29	FUEL TANK	127.56	DEG.	F	ALM
C	30	FUEL OUTLET	147.32	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 13:54:26

STOPPED SINGLE SCAN 10 NOV 87 13:54:27

BEGIN SCAN GROUP 1 10 NOV 87 13:24:31
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	324.71	DEG.	F	ALM
C	2	EXHAUST 2	332.57	DEG.	F	ALM
C	3	EXHAUST 3	323.88	DEG.	F	ALM
C	4	EXHAUST 4	362.71	DEG.	F	ALM
C	5	EXHAUST 5	368.62	DEG.	F	ALM
C	6	EXHAUST 6	348.33	DEG.	F	ALM
C	7	ENG. COOL. IN	171.71	DEG.	F	ALM
C	8	ENG. COOL. OUT	186.87	DEG.	F	ALM
C	9	OIL SUMP	211.81	DEG.	F	ALM
C	10	OIL GALLERY	211.89	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.73	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.72	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.16	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.38	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.38	DEG.	F	ALM
C	18	GEN. AIR IN	122.29	DEG.	F	ALM
C	19	GEN. AIR OUT	138.83	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.16	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.38	DEG.	F	ALM
C	22	GEN. EXCITER	138.88	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.81	DEG.	F	ALM
C	24	CONTROL PANEL	138.98	DEG.	F	ALM
C	25	RELAY AREA	125.74	DEG.	F	ALM
C	26	BATTERY LEFT	148.64	DEG.	F	ALM
C	27	BATTERY RIGHT	152.32	DEG.	F	ALM
C	28	AIR IN SET	124.81	DEG.	F	ALM
C	29	FUEL TANK	127.89	DEG.	F	ALM
C	30	FUEL OUTLET	147.84	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 13:24:41

STOPPED SINGLE SCAN 10 NOV 87 13:24:41

BEGIN SCAN GROUP 1 10 NOV 87 14:24:38
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	334.65	DEG.	F	ALM
C	2	EXHAUST 2	333.59	DEG.	F	ALM
C	3	EXHAUST 3	324.42	DEG.	F	ALM
C	4	EXHAUST 4	358.43	DEG.	F	ALM
C	5	EXHAUST 5	364.48	DEG.	F	ALM
C	6	EXHAUST 6	347.62	DEG.	F	ALM
C	7	ENG. COOL. IN	171.76	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.88	DEG.	F	ALM
C	9	OIL SUMP	212.41	DEG.	F	ALM
C	10	OIL GALLERY	212.59	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.16	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.34	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.28	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.87	DEG.	F	ALM
C	18	GEN. AIR IN	122.85	DEG.	F	ALM
C	19	GEN. AIR OUT	138.35	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.88	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.61	DEG.	F	ALM
C	22	GEN. EXCITER	129.61	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.88	DEG.	F	ALM
C	24	CONTROL PANEL	131.55	DEG.	F	ALM
C	25	RELAY AREA	125.66	DEG.	F	ALM
C	26	BATTERY LEFT	148.91	DEG.	F	ALM
C	27	BATTERY RIGHT	153.52	DEG.	F	ALM
C	28	AIR IN SET	123.46	DEG.	F	ALM
C	29	FUEL TANK	127.61	DEG.	F	ALM
C	30	FUEL OUTLET	148.19	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 14:24:48

STOPPED SINGLE SCAN 10 NOV 87 14:24:48

BEGIN SCAN GROUP 1 10 NOV 87 14:54:53
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	333.13	DEG.	F	ALM
C	2	EXHAUST 2	338.54	DEG.	F	ALM
C	3	EXHAUST 3	327.13	DEG.	F	ALM
C	4	EXHAUST 4	368.03	DEG.	F	ALM
C	5	EXHAUST 5	364.89	DEG.	F	ALM
C	6	EXHAUST 6	344.27	DEG.	F	ALM
C	7	ENG. COOL. IN	172.02	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.25	DEG.	F	ALM
C	9	OIL SUMP	212.35	DEG.	F	ALM
C	10	OIL GALLERY	212.51	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.58	DEG.	F	ALM
C	14	RAD. TOP LEFT	136.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.45	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.59	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.46	DEG.	F	ALM
C	18	GEN. AIR IN	123.24	DEG.	F	ALM
C	19	GEN. AIR OUT	136.79	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.18	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.84	DEG.	F	ALM
C	22	GEN. EXCITER	138.06	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.86	DEG.	F	ALM
C	24	CONTROL PANEL	131.59	DEG.	F	ALM
C	25	RELAY AREA	126.02	DEG.	F	ALM
C	26	BATTERY LEFT	149.28	DEG.	F	ALM
C	27	BATTERY RIGHT	154.18	DEG.	F	ALM
C	28	AIR IN SET	124.40	DEG.	F	ALM
C	29	FUEL TANK	127.58	DEG.	F	ALM
C	30	FUEL OUTLET	148.56	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 14:55:03

STOPPED SINGLE SCAN 10 NOV 87 14:55:03

BEGIN SCAN GROUP 1 10 NOV 87 15:24:43
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	335.65	DEG.	F	ALM
C	2	EXHAUST 2	336.33	DEG.	F	ALM
C	3	EXHAUST 3	328.88	DEG.	F	ALM
C	4	EXHAUST 4	368.46	DEG.	F	ALM
C	5	EXHAUST 5	366.77	DEG.	F	ALM
C	6	EXHAUST 6	345.41	DEG.	F	ALM
C	7	ENG. COOL. IN	172.44	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.69	DEG.	F	ALM
C	9	OIL SUMP	212.85	DEG.	F	ALM
C	10	OIL GALLERY	212.98	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.83	DEG.	F	ALM
C	14	RAD. TOP LEFT	136.37	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.72	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.99	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.76	DEG.	F	ALM
C	18	GEN. AIR IN	123.39	DEG.	F	ALM
C	19	GEN. AIR OUT	131.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.67	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.48	DEG.	F	ALM
C	22	GEN. EXCITER	138.61	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.17	DEG.	F	ALM
C	24	CONTROL PANEL	131.95	DEG.	F	ALM
C	25	RELAY AREA	126.31	DEG.	F	ALM
C	26	BATTERY LEFT	149.49	DEG.	F	ALM
C	27	BATTERY RIGHT	155.29	DEG.	F	ALM
C	28	AIR IN SET	124.74	DEG.	F	ALM
C	29	FUEL TANK	127.58	DEG.	F	ALM
C	30	FUEL OUTLET	148.88	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 15:24:53

STOPPED SINGLE SCAN 10 NOV 87 15:24:53

BEGIN SCAN GROUP 1 10 NOV 87 15:54:44
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	336.44	DEG.	F	ALM
C	2	EXHAUST 2	338.68	DEG.	F	ALM
C	3	EXHAUST 3	331.89	DEG.	F	ALM
C	4	EXHAUST 4	368.59	DEG.	F	ALM
C	5	EXHAUST 5	366.17	DEG.	F	ALM
C	6	EXHAUST 6	344.94	DEG.	F	ALM
C	7	ENG. COOL. IN	172.67	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.87	DEG.	F	ALM
C	9	OIL SUMP	213.86	DEG.	F	ALM
C	10	OIL GALLERY	213.12	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.88	DEG.	F	ALM
C	14	RAD. TOP LEFT	136.34	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	138.85	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.96	DEG.	F	ALM
C	18	GEN. AIR IN	123.41	DEG.	F	ALM
C	19	GEN. AIR OUT	131.55	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.79	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.47	DEG.	F	ALM
C	22	GEN. EXCITER	138.37	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.39	DEG.	F	ALM
C	24	CONTROL PANEL	132.16	DEG.	F	ALM
C	25	RELAY AREA	126.45	DEG.	F	ALM
C	26	BATTERY LEFT	149.97	DEG.	F	ALM
C	27	BATTERY RIGHT	155.83	DEG.	F	ALM
C	28	AIR IN SET	124.47	DEG.	F	ALM
C	29	FUEL TANK	127.88	DEG.	F	ALM
C	30	FUEL OUTLET	148.55	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 15:54:56

STOPPED SINGLE SCAN 10 NOV 87 15:54:56

BEGIN SCAN GROUP 1 10 NOV 87 16:24:47
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	336.87	DEG.	F	ALM
C	2	EXHAUST 2	336.49	DEG.	F	ALM
C	3	EXHAUST 3	332.22	DEG.	F	ALM
C	4	EXHAUST 4	368.25	DEG.	F	ALM
C	5	EXHAUST 5	362.18	DEG.	F	ALM
C	6	EXHAUST 6	343.75	DEG.	F	ALM
C	7	ENG. COOL. IN	171.57	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.85	DEG.	F	ALM
C	9	OIL SUMP	212.55	DEG.	F	ALM
C	10	OIL GALLE	212.75	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.55	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.17	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.59	DEG.	F	ALM
C	16	RAD. TOP RIGHT	136.98	DEG.	F	ALM
C	17	RAD. BTM RIGHT	137.78	DEG.	F	ALM
C	18	GEN. AIR IN	122.83	DEG.	F	ALM
C	19	GEN. AIR OUT	138.13	DEG.	F	ALM
C	20	GEN. FRAME TOP	125.45	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.86	DEG.	F	ALM
C	22	GEN. EXCITER	129.13	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.88	DEG.	F	ALM
C	24	CONTROL PANEL	131.12	DEG.	F	ALM
C	25	RELAY AREA	125.15	DEG.	F	ALM
C	26	BATTERY LEFT	149.89	DEG.	F	ALM
C	27	BATTERY RIGHT	155.64	DEG.	F	ALM
C	28	AIR IN SET	123.86	DEG.	F	ALM
C	29	FUEL TANK	126.88	DEG.	F	ALM
C	30	FUEL OUTLET	147.96	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 16:24:57

STOPPED SINGLE SCAN 10 NOV 87 16:24:57

BEGIN SCAN GROUP 1 10 NOV 87 16:54:45
30KW 50HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	343.77	DEG.	F	ALM
C	2	EXHAUST 2	331.26	DEG.	F	ALM
C	3	EXHAUST 3	329.71	DEG.	F	ALM
C	4	EXHAUST 4	365.36	DEG.	F	ALM
C	5	EXHAUST 5	362.04	DEG.	F	ALM
C	6	EXHAUST 6	346.89	DEG.	F	ALM
C	7	ENG. COOL. IN	172.28	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.43	DEG.	F	ALM
C	9	OIL SUMP	212.96	DEG.	F	ALM
C	10	OIL GALLERY	212.94	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.44	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.93	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.35	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.62	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.44	DEG.	F	ALM
C	18	GEN. AIR IN	123.24	DEG.	F	ALM
C	19	GEN. AIR OUT	131.04	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.19	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.78	DEG.	F	ALM
C	22	GEN. EXCITER	138.16	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.11	DEG.	F	ALM
C	24	CONTROL PANEL	131.64	DEG.	F	ALM
C	25	RELAY AREA	125.93	DEG.	F	ALM
C	26	BATTERY LEFT	158.31	DEG.	F	ALM
C	27	BATTERY RIGHT	156.41	DEG.	F	ALM
C	28	AIR IN SET	124.85	DEG.	F	ALM
C	29	FUEL TANK	126.78	DEG.	F	ALM
C	30	FUEL OUTLET	148.93	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 16:54:55

STOPPED SINGLE SCAN 10 NOV 87 16:54:55

ITEM 30 Kw / 60 Hz

GENERATOR SET

MANAGER

MFG. LABBY WELDON

MODEL NO. MHP 005A

SERIAL NO. R25 374

MTS

National
Technical
Systems

Scientific
Services
Group

Testing Division
PO Box 38
Hartwood, Virginia 22471

High Temp 710.1.3.2 (F)(C)

Tel: 703 752 5300

REF. NO. MIL-STD 705; 513.2

SHEET 1 OF 2

DATE 11 Nov 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER GC/BJ/KM

TEST DATA

INDICATING INSTRUMENT TEST (ELECTRICAL)

MASTER INSTRUMENTS

INST TIME	SIE. NO.	LOAD STEP	VOLTAGE			AMPERES			KILOWATTS			POWER FACTOR	FREQ. Hz	EXCITER FIELD		AMB. TEMP. °F	AN/ECA W/H2O
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW			VOLTS VDC	AMPS DCA		
1054			STARTED UNIT														
1116		2 1/2	126.1	126.1	126.1	0	0	0	0	0	0	0	57.9	4.1	1.6	120	39/257
1118		2 1/2	126.9	127	127	0	0	0	0	0	0	0	57.0	5.0	2.0	121	28/21.9
1120		2 1/2	124.1	124.9	124.5	0	0	0	0	0	0	0	62.1	3.5	1.4	122	19/25.3
1123		4	124	124.5	124.1	.65	.67	.67	.067	.067	.067	.72	60.1	5.1	2.0	123	39/27.9
1125		4	124	125	124.9	.70	.70	.70	.065	.068	.068	.75	57.1	6.3	2.5	123	27/24.4
1127		4 1/4	123.9	124.1	124	.65	.66	.66	.065	.066	.067	.80	62.2	4.6	1.8	124	17/24.8
1133		4 1/2	123.1	124.1	124	1.25	1.26	1.26	.122	.126	.126	.799	57.9	6.3	2.5	125	37/33.3
1135		4 1/2	123.7	124.9	124	1.29	1.31	1.31	.125	.129	.129	.755	57.0	7.7	3.0	126	25/4.1
1137		4 1/2	123	124	123.9	1.25	1.26	1.26	.121	.125	.125	.81	62.0	5.8	2.2	127	14/35.4
1143		3 1/4	123	124	123.5	1.85	1.85	1.85	.182	.180	.180	.80	57.8	7.8	3.0	128	34/32.7
1145		3 1/4	120	121	120.9	1.81	1.84	1.85	.172	.180	.180	.77	57.1	8.6	3.3	123	12/38.6
1146		3 1/4	122.3	123.1	123	1.80	1.85	1.85	.180	.187	.185	.83	62.1	7.0	2.6	122	13/35.6
1151		4 1/4	122	123.5	123	2.41	2.45	2.45	.242	.25	.25	.801	60.0	9.1	3.4	121	34/40.9
1152		4 1/4	122.1	124	123	2.45	2.5	2.5	.245	.251	.25	.77	57.2	10.6	4.12	123	20/37.8
1154		4 1/4	121.9	123	122.5	2.39	2.41	2.41	.241	.25	.249	.82	62.0	8.4	3.2	122	39/42.4
1155			SHUT UNIT				END OF										

AMMETER & POWER INDICATOR (7. LONG) OUT OF SPEC (SEE COMPARISON SHEET)

NOTES:

TEST DATA

REF. NO. MIL-STD 705; 513.2

SHEET 2 OF 2

DATE 11 Nov 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER BT

Scientific Testing Division

PO Box 38

Hamwood, Virginia 22471

tel: 703 752 5300

Group

National

Technical

MTS

ITEM 30 Kw / 60 Hz

GENERATOR SET

11/20/87

MPGR. CARRY WELAND

MODEL NO. MPO05A

SERIAL NO. 125 3774

HIGH TEMP. 710.132 (EKG)

INDICATING INSTRUMENT TEST (ELECTRICAL)

PANEL, INSTRUMENTS

INST TIME	STEP NO.	LOAD STEP	VOLTAGE			AMPERES			KILOWATTS			POWER FACTOR PF	FREQ. Hz	% LOAD			AMB. TEMP °F
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0			L1-L0	L2-L0	L3-L0	
			VAC	VAC	VAC	AC AMPS	AC AMPS	AC AMPS	Kw	Kw	Kw						
			SET	ZERO	ON	ANAL	METERS										
11/16		1/16	120	120	120	0	0	0	N/A	N/A	N/A	N/A	60	0	0	0	0
11/17		1/16	120	120	120	0	0	0	N/A	N/A	N/A	N/A	57	0	0	0	0
11/18		1/16	120	120	120	0	0	0	N/A	N/A	N/A	N/A	62	0	0	0	0
11/19		1/4	120	120	120	20	20	20	N/A	N/A	N/A	N/A	60	25	25	25	25
11/20		1/4	120	120	120	20	20	20	N/A	N/A	N/A	N/A	57	25	25	25	25
11/21		1/4	120	120	120	20	20	20	N/A	N/A	N/A	N/A	62	25	25	25	25
11/22		1/2	120	120	120	43	43	43	N/A	N/A	N/A	N/A	60	49	49	49	49
11/23		1/2	120	120	120	43	43	43	N/A	N/A	N/A	N/A	57	50	50	50	50
11/24		1/2	120	120	120	41	42	42	N/A	N/A	N/A	N/A	62	49	49	49	49
11/25		3/4	120	120	120	67	69	69	N/A	N/A	N/A	N/A	60	74	74	74	74
11/26		3/4	120	120	120	67	69	69	N/A	N/A	N/A	N/A	57	72	72	72	72
11/27		3/4	120	120	120	66	68	68	N/A	N/A	N/A	N/A	62	73	73	73	73
11/28		4/4	120	120	120	90	90	90	N/A	N/A	N/A	N/A	60	100	100	100	100
11/29		4/4	120	120	120	90	92	92	N/A	N/A	N/A	N/A	57	101	101	101	101
11/30		4/4	120	120	120	89	90	90	N/A	N/A	N/A	N/A	62	100	100	100	100
11/31		SHUT	SHUT	SHUT	SHUT	OFF	OFF	OFF	TEST								

NOTES:

NTS

Generator Set
Modified

MODEL NO. MDP 005A

SERIAL NO. RZS-3774

REF. NO. 101-524 705

SHEET 1 OF 2

DATE 13 Jan 1988

JOB NO. 565-2140

PROJ. ENGR.

RECORDED/OBSERVER:

**National
Technical
Systems**

Deed Testamentary Tel: 703 752 5300

Method 513.2 (computation sheet)

[illegible]

27-2711. 0407 255. 2V 2505 2V 2550 2V

3311

TEST DATA

MTS

REF. NO. MIL-STD 705 Para. 608.1

SHEET 2 OF 2

National Scientific Testing Division
Technical Services P.O. Box 38
Systems Group Harwood, Virginia 22471
Frequency and Voltage Tel: 703 752 5300

ITEM 30 Kw / 60 Hz
GENERATOR SET
MODELED
HFGF. LABA WELDON
MODEL NO. 1189 0054
SERIAL NO. 1189 3224

DATE 11 Nov 1987
JOB NO. 555-2140
PROJ. ENGR.

Regulation, Stability and Transient Response Test RECORDER/OBSERVER GC/BJ/KM

(Short Term) 70.1.3.2 (4X7)

INST TIME	STEP NO.	LOAD STEP	E-60340 VOLTAGE x1			E-60400 AMPERES x40			E-62300 KILOWATTS x40			POWER FACTOR	FREQ. Hz	E-62110 EXCITER FIELD		AMB. TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW			VOLTS VDC	AMPS DCA	
		Y4	121	121.5	121	.66	.65	.66	.064	.063	.063	.80	61.5	5.0	1.88	NA
		N4	121.5	121.5	121.5	.66	.67	.67	.062	.063	.063	.80	61.5	3.8	1.44	NA
		Y4	121.5	121.5	121.5	.66	.67	.67	.062	.063	.063	.80	61.5	5.0	1.88	NA
		N4	121.5	121.5	121.5	.66	.67	.67	.062	.063	.063	.80	61.5	3.8	1.44	NA
		Y4	121	121.5	121.5	.67	.67	.67	.062	.063	.063	.80	61.5	5.1	1.84	NA
		N4	121.5	121.5	121.5	.67	.67	.67	.062	.063	.063	.80	61.5	3.8	1.44	NA
		Y4	119.5	121	121	2.5	2.53	2.53	.245	.251	.250	.80	57.9	9.1	3.52	NA
		N4	121.5	121.5	121	2.44	2.54	2.53	.244	.251	.250	.80	57.9	3.9	1.44	NA
		Y4	119	121	121	2.44	2.54	2.53	.244	.251	.250	.80	57.9	9.0	3.48	NA
		N4	121.5	121	121	2.44	2.54	2.53	.244	.251	.250	.80	57.9	3.8	1.40	NA
		Y4	119	121.5	121	2.44	2.53	2.53	.244	.251	.250	.80	57.9	9.1	3.44	NA
		N4	121.5	121	121	2.44	2.53	2.53	.244	.251	.250	.80	57.9	3.8	1.40	NA

NOTES:

TEST DATA

MTS

ITEM 30KW 60Hz REF. NO. MIC-370-705; 608.1
GENERATOR SET SHEET 1 OF 3
MODIFIED DATE 5 JAN 1988
 MFR. LIGBY WELAND JOB NO. 555-2140
 MODEL NO. MFP005A PROJ. ENGR.
 SERIAL NO. R253774 RECORDER/OBSERVER BJT, KAY, G.C.

National Technical Systems
 Scientific Services Group
 Testing Division
 P.O. Box 38
 Herndon, Virginia 22471
 Tel: 703 752 5300

FREQUENCY AND VOLTAGE

REGULATION, STABILITY, AND TRANSIENT RESPONSE TEST (SHORT TERM)

LOAD STEP	FREQUENCY		VOLTAGE		REC. TIME SEC.	CONSTANT BANDWIDTH	MAXIMUM EXCURSION		UNDERSHOOT	VOLT	CONSTANT BANDWIDTH	REC. TIME SEC.	CONSTANT BANDWIDTH
	UNDERSHOOT HZ	OVERSHOOT HZ	UNDERSHOOT HZ	OVERSHOOT HZ			UNDERSHOOT HZ	OVERSHOOT HZ					
1													
1-2		1.5			.39	.10		4.34	3.12			.23	.15
2					.625	.085							
2-3			1.1	1.8	.47	.085			3.99	3.33		.23	.15
3													
3-4		1.3			.47	.065		2.25	1.88			.08	.15
4													
4-5			1.01	1.7	.7	.065			1.74	1.45		.31	.15
5													
5-6		1.04			.39	.05		3.99	3.33			.08	.15
6													
6-7			1.08	1.80	.7	.05			3.99	3.33		.23	.15
7													
7-8		1.01	1.70		.156	.05		2.43	2.03			.08	.07
8													
8-9			.83	1.35	.46	.05						.26	.22
9						.19				1.21	1.01	.16	.22
9-10		.63	1.04		.46	.05		1.74	1.45			.23	.22
10													
10-11			.59	.98	.39	.05				1.21	1.01	.08	.15
11													
11-12		1.09			.46	.069		1.74	1.45			.08	.15
12													
12-13			.73	1.21	.39	.087				1.56	1.30	.08	.15
13													
13-14		.66	1.10		.31	.087		1.74	1.45			.16	.15

NOTES:

TEST DATA

MTS

ITEM 30 KW 60 Hz

REF. NO. MKS 570 205: 608.1

GENERATOR SET

SHEET 2 OF 3

MODIFIED

National Technical Systems

Scientific Services Group

DATE 5 JAN 1988

HFGR. LIBBY WELDING

P.O. Box 38

JOB NO. 555-2140

MODEL NO. MEP005A

Harbord, Virginia 22471

PROJ. ENGR.

SERIAL NO. R253774

FREQUENCY AND VOLTAGE

RECORDER/OBSERVER BJ am. G.C.

FREQUENCY										VOLTAGE									
LOAD STEP	MAXIMUM EXCURSION		REC. TIME SEC.	CONSTANT LOAD BANDWIDTH		FREQ. HZ	REGULATION VOLT		MAXIMUM EXCURSION OVERSHOOT	VOLT	UNDERSHOOT		REC. TIME SEC.	CONSTANT LOAD BANDWIDTH		VOLT	CONSTANT LOAD BANDWIDTH		VOLT
	HZ	HZ		HZ	HZ		HZ	HZ		HZ	HZ	HZ		HZ	HZ		HZ	HZ	
14			0	.07	.12	1.50	.83	.83			.69	.58	0			.17	.15		
14-15	.55	.73	0	.09	.15	1.33	1.25	.69	.58				0			.17	.15		
15			0	.04	.06	1.50	.83	.83			1.21	1.01	0			.17	.15		
15-16	.45	.75	0	.09	.15	1.50	.83	.83	.43				0			.17	.15		
16-17			0	.05	.09	1.50	.83	.83			1.04	.87	0			.17	.15		
17			0	.05	.15	1.66	.41	.35	.29				0			.17	.15		
17-18	.52	.87	0	.05	.09	.83	.41	.41			.52	.43	0			.17	.15		
18			0	.07	.12	.66	.41	.41	.43				0			.17	.15		
18-19	.55	.93	0	.07	.12	.66	0	0	.29		.35	.29	0			.17	.15		
19			0	.05	.09	.66	0	0					0			.17	.15		
19-20	.49	.81	0	.05	.09	.66	0	0	.29		.35	.29	0			.17	.15		
20			0	.07	.12	.66	.41	.41					0			.17	.15		
20-21	.17	.29	0	.07	.12	.66	0	0	.29		.35	.29	0			.17	.15		
21			0	.07	.12	.66	0	0					0			.17	.15		
21-22	.10	.17	0	.07	.12	.66	0	0	.29		.35	.29	0			.17	.15		
22			0	.05	.09	.66	0	0					0			.17	.15		
22-23	.17	.29	0	.05	.09	.66	0	0	.29		.35	.29	0			.17	.15		
23			0	.05	.09	.66	0	0					0			.17	.15		
23-24	.17	.29	0	.05	.09	.66	0	0	.29		.35	.29	0			.17	.15		
24			0	.05	.09	.66	0	0					0			.17	.15		
24-25	.17	.29	0	.05	.09	.66	0	0	.29		.35	.29	0			.17	.15		
25			0	.05	.09	.66	0	0					0			.17	.15		
25-26	.17	.29	0	.05	.09	.66	.41	.41	.43				0			.17	.15		
26			0	.07	.12	.3.33	1.66	1.66					0			.17	.15		
26-27			.63								3.34	2.75	.23			.17	.15		

TEST DATA

ITEM	30KW 60Hz	REF. NO.	MM-800-7005 608.1
GENERATOR SET		SHEET	3 OF 3
MODIFIED		DATE	5 JAN 1988
NRGR. 11384 WELWALC		JOB NO.	555-2140
MODEL NO. MRP 005A		PROJ.	ENGR.
SERIAL NO. R253774		RECORDER/OBSERVER	AT K. C. C.

National Technical Systems
Scientific Services Group
Insling Division
P.O. Box 36
Hartwood, Virginia 22471
Tel: 703 752 5300

FREQUENCY AND VOLTAGE

REGULATION, STABILITY, AND TRANSIENT RESPONSE

TEST (SHORT TERM)

LOAD STEP	FREQUENCY			VOLTAGE			REC. TIME SEC.	CONSTANT LOAD		REC. TIME SEC.	CONSTANT BANDWIDTH	
	MAXIMUM OVERSHOOT HZ	EXCURSION HZ	UNDERSHOOT HZ	CONSTANT BANDWIDTH HZ	REGULATION FREQ. HZ	VOLT V		MAXIMUM OVERSHOOT VOLT	EXCURSION VOLT		UNDERSHOOT VOLT	CONSTANT BANDWIDTH VOLT
22	1.04	1.24		.15	.26	1.66	.31	3.41	2.87			.17
23				.09	.15	1.66	.16					.17
24				.09	.15	1.66	.23					.17
25	1.01	1.68		.07	.12	1.66	.16	2.60	2.17			.17
26				.12	.20	1.66	.23					.17
27	1.01	1.68		.07	.12	1.66	.16	3.3	2.75			.17

NOTES:

FREQ/VOLTAGE REG, STABILITY & TRANSIENT RESPONSE 609.1

BEGIN SCAN GROUP 1 11 NOV 87 13:44:35
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	787.52	DEG.	F	ALM
C	2	EXHAUST 2	797.10	DEG.	F	ALM
C	3	EXHAUST 3	821.42	DEG.	F	ALM
C	4	EXHAUST 4	788.92	DEG.	F	ALM
C	5	EXHAUST 5	779.98	DEG.	F	ALM
C	6	EXHAUST 6	772.54	DEG.	F	ALM
C	7	ENG. COOL. IN	200.31	DEG.	F	ALM
C	8	ENG. COOL. OUT	208.29	DEG.	F	ALM
C	9	OIL SUMP	227.96	DEG.	F	ALM
C	10	OIL GALLERY	229.73	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.57	DEG.	F	ALM
C	14	RAD. TOP LEFT	145.68	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.41	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.83	DEG.	F	ALM
C	17	RAD. BTM RIGHT	144.53	DEG.	F	ALM
C	18	GEN. AIR IN	120.19	DEG.	F	ALM
C	19	GEN. AIR OUT	140.64	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.39	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.27	DEG.	F	ALM
C	22	GEN. EXCITER	129.54	DEG.	F	ALM
C	23	GEN. VOLT. REG.	137.55	DEG.	F	ALM
C	24	CONTROL PANEL	135.52	DEG.	F	ALM
C	25	RELAY AREA	127.08	DEG.	F	ALM
C	26	BATTERY LEFT	121.09	DEG.	F	ALM
C	27	BATTERY RIGHT	125.45	DEG.	F	ALM
C	28	AIR IN SET	122.39	DEG.	F	ALM
C	29	FUEL TANK	103.84	DEG.	F	ALM
C	30	FUEL OUTLET	150.58	DEG.	F	ALM

END SCAN GROUP 1 11 NOV 87 13:44:45

STOPPED SINGLE SCAN 11 NOV 87 13:44:45

BEGIN SCAN GROUP 1 11 NOV 87 13:55:12
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	789.81	DEG.	F	ALM
C	2	EXHAUST 2	801.27	DEG.	F	ALM
C	3	EXHAUST 3	824.10	DEG.	F	ALM
C	4	EXHAUST 4	782.97	DEG.	F	ALM
C	5	EXHAUST 5	786.27	DEG.	F	ALM
C	6	EXHAUST 6	777.43	DEG.	F	ALM
C	7	ENG. COOL. IN	202.80	DEG.	F	ALM
C	8	ENG. COOL. OUT	210.96	DEG.	F	ALM
C	9	OIL SUMP	233.01	DEG.	F	ALM
C	10	OIL GALLERY	234.38	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.29	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.68	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.57	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.93	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.87	DEG.	F	ALM
C	18	GEN. AIR IN	123.02	DEG.	F	ALM
C	19	GEN. AIR OUT	142.87	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.53	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.66	DEG.	F	ALM
C	22	GEN. EXCITER	131.11	DEG.	F	ALM
C	23	GEN. VOLT. REG.	136.05	DEG.	F	ALM
C	24	CONTROL PANEL	133.90	DEG.	F	ALM
C	25	RELAY AREA	127.93	DEG.	F	ALM
C	26	BATTERY LEFT	122.78	DEG.	F	ALM
C	27	BATTERY RIGHT	127.39	DEG.	F	ALM
C	28	AIR IN SET	125.22	DEG.	F	ALM
C	29	FUEL TANK	105.53	DEG.	F	ALM
C	30	FUEL OUTLET	149.52	DEG.	F	ALM

END SCAN GROUP 1 11 NOV 87 13:55:22

STOPPED SINGLE SCAN 11 NOV 87 13:55:22

BEGIN SCAN GROUP 1 11 NOV 87 14:04:27
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	794.66	DEG.	F	ALM
C	2	EXHAUST 2	807.53	DEG.	F	ALM
C	3	EXHAUST 3	828.64	DEG.	F	ALM
C	4	EXHAUST 4	789.23	DEG.	F	ALM
C	5	EXHAUST 5	794.19	DEG.	F	ALM
C	6	EXHAUST 6	784.89	DEG.	F	ALM
C	7	ENG. COOL. IN	205.30	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.47	DEG.	F	ALM
C	9	OIL SUMP	235.82	DEG.	F	ALM
C	10	OIL GALLERY	237.16	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	133.09	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.81	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.70	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.42	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.41	DEG.	F	ALM
C	18	GEN. AIR IN	123.82	DEG.	F	ALM
C	19	GEN. AIR OUT	144.63	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.40	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.10	DEG.	F	ALM
C	22	GEN. EXCITER	132.52	DEG.	F	ALM
C	23	GEN. VOLT. REG.	136.25	DEG.	F	ALM
C	24	CONTROL PANEL	134.67	DEG.	F	ALM
C	25	RELAY AREA	129.29	DEG.	F	ALM
C	26	BATTERY LEFT	124.58	DEG.	F	ALM
C	27	BATTERY RIGHT	127.88	DEG.	F	ALM
C	28	AIR IN SET	125.30	DEG.	F	ALM
C	29	FUEL TANK	107.00	DEG.	F	ALM
C	30	FUEL OUTLET	150.03	DEG.	F	ALM

END SCAN GROUP 1 11 NOV 87 14:04:37

STOPPED SINGLE SCAN 11 NOV 87 14:04:37

BEGIN SCAN GROUP 1 11 NOV 87 14:14:33
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	790.31	DEG.	F	ALM
C	2	EXHAUST 2	803.79	DEG.	F	ALM
C	3	EXHAUST 3	826.00	DEG.	F	ALM
C	4	EXHAUST 4	785.27	DEG.	F	ALM
C	5	EXHAUST 5	789.74	DEG.	F	ALM
C	6	EXHAUST 6	779.63	DEG.	F	ALM
C	7	ENG. COOL. IN	204.55	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.78	DEG.	F	ALM
C	9	OIL SUMP	236.85	DEG.	F	ALM
C	10	OIL GALLERY	238.36	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.85	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.23	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.21	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.06	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.87	DEG.	F	ALM
C	18	GEN. AIR IN	122.66	DEG.	F	ALM
C	19	GEN. AIR OUT	144.67	DEG.	F	ALM
C	20	GEN. FRAME TOP	130.93	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.89	DEG.	F	ALM
C	22	GEN. EXCITER	131.75	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.04	DEG.	F	ALM
C	24	CONTROL PANEL	134.32	DEG.	F	ALM
C	25	RELAY AREA	128.48	DEG.	F	ALM
C	26	BATTERY LEFT	126.18	DEG.	F	ALM
C	27	BATTERY RIGHT	129.20	DEG.	F	ALM
C	28	AIR IN SET	124.55	DEG.	F	ALM
C	29	FUEL TANK	100.68	DEG.	F	ALM
C	30	FUEL OUTLET	150.87	DEG.	F	ALM

END SCAN GROUP 1 11 NOV 87 14:14:43

STOPPED SINGLE SCAN 11 NOV 87 14:14:43

BEGIN SCAN GROUP 1 11 NOV 87 14:24:43
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	792.53	DEG.	F	ALM
C	2	EXHAUST 2	803.76	DEG.	F	ALM
C	3	EXHAUST 3	826.86	DEG.	F	ALM
C	4	EXHAUST 4	787.82	DEG.	F	ALM
C	5	EXHAUST 5	792.58	DEG.	F	ALM
C	6	EXHAUST 6	778.51	DEG.	F	ALM
C	7	ENG. COOL. IN	204.59	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.03	DEG.	F	ALM
C	9	OIL SUMP	237.26	DEG.	F	ALM
C	10	OIL GALLERY	238.70	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.21	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.47	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.76	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.36	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.28	DEG.	F	ALM
C	18	GEN. AIR IN	122.43	DEG.	F	ALM
C	19	GEN. AIR OUT	145.03	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.08	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.80	DEG.	F	ALM
C	22	GEN. EXCITER	131.69	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.61	DEG.	F	ALM
C	24	CONTROL PANEL	134.23	DEG.	F	ALM
C	25	RELAY AREA	128.75	DEG.	F	ALM
C	26	BATTERY LEFT	127.17	DEG.	F	ALM
C	27	BATTERY RIGHT	131.59	DEG.	F	ALM
C	28	AIR IN SET	125.32	DEG.	F	ALM
C	29	FUEL TANK	118.24	DEG.	F	ALM
C	30	FUEL OUTLET	150.53	DEG.	F	ALM

END SCAN GROUP 1 11 NOV 87 14:24:54

STOPPED SINGLE SCAN 11 NOV 87 14:24:54

BEGIN SCAN GROUP 1 11 NOV 87 14:39:45
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	783.67	DEG.	F	ALM
C	2	EXHAUST 2	795.45	DEG.	F	ALM
C	3	EXHAUST 3	816.68	DEG.	F	ALM
C	4	EXHAUST 4	781.78	DEG.	F	ALM
C	5	EXHAUST 5	788.95	DEG.	F	ALM
C	6	EXHAUST 6	769.76	DEG.	F	ALM
C	7	ENG. COOL. IN	204.20	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.36	DEG.	F	ALM
C	9	OIL SUMP	237.38	DEG.	F	ALM
C	10	OIL GALLERY	238.85	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.52	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.79	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.85	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.81	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.43	DEG.	F	ALM
C	18	GEN. AIR IN	123.21	DEG.	F	ALM
C	19	GEN. AIR OUT	145.73	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.59	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.48	DEG.	F	ALM
C	22	GEN. EXCITER	132.17	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.53	DEG.	F	ALM
C	24	CONTROL PANEL	134.47	DEG.	F	ALM
C	25	RELAY AREA	129.01	DEG.	F	ALM
C	26	BATTERY LEFT	129.18	DEG.	F	ALM
C	27	BATTERY RIGHT	133.65	DEG.	F	ALM
C	28	AIR IN SET	125.53	DEG.	F	ALM
C	29	FUEL TANK	112.60	DEG.	F	ALM
C	30	FUEL OUTLET	151.23	DEG.	F	ALM

END SCAN GROUP 1 11 NOV 87 14:39:55

STOPPED SINGLE SCAN 11 NOV 87 14:39:55

TEST DATA

ITEM 30 KW 60 Hz

GENERATOR SET

MODIFIED

NGR. 11007 WELCONIC

MODEL NO. MEA 005A

SERIAL NO. R2 53774

MTS

National
Technical
Systems

Scientific
Services
Group

Testing Division
PO Box 38
Haltwood, Virginia 22471

tel: 703 752 5300

CIRCUIT INTERRUPTER

(SHORT CIRCUIT)

REF. NO. MIL-STD 705

SHEET 1 OF 1

DATE 14 NOV 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER GC/BJ/KM

INST TIME	STEP NO.	LOAD STEP	E 60280			E 60400			E 62300			E 62400 POWER REACTOR PF	E 62400 FREQ. Hz	E 61850		AMR TEMP °F	PRESS. IN/EXH IN Hg
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMP	L2-L0 AC AMP	L3-L0 AC AMP	L1-L0 KW	L2-L0 KW	L3-L0 KW			EXCITED VOLTS VDC	FIELD AMPS DCA		
1108		STARTED UNIT															
1109		PLACED UNIT ON															
1114		R/L 119	120.5	120	120	2.52	2.56	2.55	.248	.253	.252	.805	60.3	8.2	3.3	124	13.6
1117		APPLIED SHORT CIRCUIT															
1125		RESET CIRCUIT BREAKER															
1126		R/L 119	120.5	120	120	2.52	2.56	2.55	.248	.253	.252	.805	60.1	8.5	3.3	125	13.5
1127		APPLIED SHORT CIRCUIT															
1131		RESET CIRCUIT BREAKER															
1134		R/L 119	120.5	120	120	2.51	2.55	2.55	.25	.255	.253	.80	60	8.6	3.4	124	13.5
1139		APPLIED SHORT CIRCUIT															
1140		RESET CIRCUIT BREAKER															
1141		R/L 119	120.5	120	120	2.52	2.56	2.55	.248	.254	.253	.805	60	8.6	3.4	124	13.5
1142		APPLIED SHORT CIRCUIT															
1146		RESET CIRCUIT BREAKER															
1147		R/L 119.5	120.5	120	120	2.52	2.56	2.56	.248	.254	.254	.805	60	8.8	3.5	126	13.5
1147		APPLIED SHORT CIRCUIT															
1151		RESET CIRCUIT BREAKER															
1151		R/L 119	120.5	120	120	2.52	2.56	2.56	.248	.254	.254	.805	59.9	8.8	3.5	125	13.6
1153		APPLIED SHORT CIRCUIT															
1155		RESET CIRCUIT BREAKER															
1156		R/L 119	120.5	120	120	2.52	2.56	2.56	.249	.255	.254	.805	59.9	8.9	3.5	125	13.5
1157		APPLIED SHORT CIRCUIT															
1157		SHORT UNIT DOWN															

NOTES:

NTS

GENERATOR SET

MODIFIED

MFGR. LEOY WELING.

MODEL NO. MEP 005A

SERIAL NO. QZ 53774

REF. NO. MIC STD 705: 5121C

SHEET / OF /

DATE 14 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDED/OBSERVER CC/BJ/K4

**National
Technical
Systems**

**Scientific
Services
Group**

**Testing Division
P.O. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300**

SHORT CIRCUIT

INTERRUPTER TEST (COMPUTATION RESULTS)

INST. →	CURRENT BEFORE SHORT	CURRENT MAX	INTERAUNT TIME
UNITS			
SYN.			
L1-L0	100.8	1013.04	58.45
L2-L0	102.4	1102.02	58.45
L3-L0	102.0	955.10	58.45
L1-L2	100.8	897.12	50.10
L2-L3	102.4	901.12	33.40
L3-L1	102.4	901.12	50.10
L1-L2-L3	102.4	1064.96	41.75

Solution:

CIRCUIT INTERRUPT (SHORT CIRCUIT) 512.1

BEGIN SCAN GROUP 1 14 NOV 87 11:13:53
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	766.33	DEG.	F	ALM
C	2	EXHAUST 2	782.01	DEG.	F	ALM
C	3	EXHAUST 3	804.90	DEG.	F	ALM
C	4	EXHAUST 4	772.69	DEG.	F	ALM
C	5	EXHAUST 5	772.82	DEG.	F	ALM
C	6	EXHAUST 6	753.76	DEG.	F	ALM
C	7	ENG. COOL. IN	187.43	DEG.	F	ALM
C	8	ENG. COOL. OUT	194.92	DEG.	F	ALM
C	9	OIL SUMP	176.60	DEG.	F	ALM
C	10	OIL GALLERY	187.75	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.72	DEG.	F	ALM
C	14	RAD. TOP LEFT	139.04	DEG.	F	ALM
C	15	RAD. BTM LEFT	132.49	DEG.	F	ALM
C	16	RAD. TOP RIGHT	132.30	DEG.	F	ALM
C	17	RAD. BTM RIGHT	135.30	DEG.	F	ALM
C	18	GEN. AIR IN	123.14	DEG.	F	ALM
C	19	GEN. AIR OUT	124.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	115.56	DEG.	F	ALM
C	21	GEN. FRAME BTM	112.10	DEG.	F	ALM
C	22	GEN. EXCITER	125.23	DEG.	F	ALM
C	23	GEN. VOLT. REG.	109.57	DEG.	F	ALM
C	24	CONTROL PANEL	115.11	DEG.	F	ALM
C	25	RELAY AREA	121.10	DEG.	F	ALM
C	26	BATTERY LEFT	101.61	DEG.	F	ALM
C	27	BATTERY RIGHT	106.74	DEG.	F	ALM
C	28	AIR IN SET	124.30	DEG.	F	ALM
C	29	FUEL TANK	91.314	DEG.	F	ALM
C	30	FUEL OUTLET	119.40	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:14:03

STOPPED SINGLE SCAN 14 NOV 87 11:14:04

BEGIN SCAN GROUP 1 14 NOV 87 11:26:00
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	716.49	DEG.	F	ALM
C	2	EXHAUST 2	727.77	DEG.	F	ALM
C	3	EXHAUST 3	741.47	DEG.	F	ALM
C	4	EXHAUST 4	707.61	DEG.	F	ALM
C	5	EXHAUST 5	707.56	DEG.	F	ALM
C	6	EXHAUST 6	688.49	DEG.	F	ALM
C	7	ENG. COOL. IN	177.45	DEG.	F	ALM
C	8	ENG. COOL. OUT	186.67	DEG.	F	ALM
C	9	OIL SUMP	194.31	DEG.	F	ALM
C	10	OIL GALLERY	205.97	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.04	DEG.	F	ALM
C	14	RAD. TOP LEFT	137.64	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.67	DEG.	F	ALM
C	16	RAD. TOP RIGHT	135.13	DEG.	F	ALM
C	17	RAD. BTM RIGHT	137.83	DEG.	F	ALM
C	18	GEN. AIR IN	124.01	DEG.	F	ALM
C	19	GEN. AIR OUT	128.77	DEG.	F	ALM
C	20	GEN. FRAME TOP	123.23	DEG.	F	ALM
C	21	GEN. FRAME BTM	121.05	DEG.	F	ALM
C	22	GEN. EXCITER	128.62	DEG.	F	ALM
C	23	GEN. VOLT. REG.	117.56	DEG.	F	ALM
C	24	CONTROL PANEL	123.74	DEG.	F	ALM
C	25	RELAY AREA	124.32	DEG.	F	ALM
C	26	BATTERY LEFT	106.64	DEG.	F	ALM
C	27	BATTERY RIGHT	109.52	DEG.	F	ALM
C	28	AIR IN SET	124.96	DEG.	F	ALM
C	29	FUEL TANK	93.212	DEG.	F	ALM
C	30	FUEL OUTLET	134.32	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:26:10

STOPPED SINGLE SCAN 14 NOV 87 11:26:10

BEGIN SCAN GROUP 1 14 NOV 87 11:32:50
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	735.26	DEG.	F	ALM
C	2	EXHAUST 2	747.57	DEG.	F	ALM
C	3	EXHAUST 3	765.49	DEG.	F	ALM
C	4	EXHAUST 4	731.69	DEG.	F	ALM
C	5	EXHAUST 5	733.21	DEG.	F	ALM
C	6	EXHAUST 6	711.77	DEG.	F	ALM
C	7	ENG. COOL. IN	184.08	DEG.	F	ALM
C	8	ENG. COOL. OUT	191.57	DEG.	F	ALM
C	9	OIL SUMP	199.58	DEG.	F	ALM
C	10	OIL GALLERY	211.48	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.62	DEG.	F	ALM
C	14	RAD. TOP LEFT	139.22	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.75	DEG.	F	ALM
C	16	RAD. TOP RIGHT	136.48	DEG.	F	ALM
C	17	RAD. BTM RIGHT	139.44	DEG.	F	ALM
C	18	GEN. AIR IN	122.76	DEG.	F	ALM
C	19	GEN. AIR OUT	130.04	DEG.	F	ALM
C	20	GEN. FRAME TOP	124.99	DEG.	F	ALM
C	21	GEN. FRAME BTM	122.96	DEG.	F	ALM
C	22	GEN. EXCITER	129.24	DEG.	F	ALM
C	23	GEN. VOLT. REG.	120.37	DEG.	F	ALM
C	24	CONTROL PANEL	126.19	DEG.	F	ALM
C	25	RELAY AREA	125.17	DEG.	F	ALM
C	26	BATTERY LEFT	100.41	DEG.	F	ALM
C	27	BATTERY RIGHT	110.37	DEG.	F	ALM
C	28	AIR IN SET	123.94	DEG.	F	ALM
C	29	FUEL TANK	94.459	DEG.	F	ALM
C	30	FUEL OUTLET	137.88	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:33:00

STOPPED SINGLE SCAN 14 NOV 87 11:33:00

BEGIN SCAN GROUP 1 14 NOV 87 11:40:15
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	691.14	DEG.	F	ALM
C	2	EXHAUST 2	699.73	DEG.	F	ALM
C	3	EXHAUST 3	705.87	DEG.	F	ALM
C	4	EXHAUST 4	679.02	DEG.	F	ALM
C	5	EXHAUST 5	685.95	DEG.	F	ALM
C	6	EXHAUST 6	662.40	DEG.	F	ALM
C	7	ENG. COOL. IN	177.32	DEG.	F	ALM
C	8	ENG. COOL. OUT	184.96	DEG.	F	ALM
C	9	OIL SUMP	202.80	DEG.	F	ALM
C	10	OIL GALLERY	215.30	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.78	DEG.	F	ALM
C	14	RAD. TOP LEFT	138.99	DEG.	F	ALM
C	15	RAD. BTM LEFT	136.51	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.11	DEG.	F	ALM
C	17	RAD. BTM RIGHT	139.28	DEG.	F	ALM
C	18	GEN. AIR IN	123.34	DEG.	F	ALM
C	19	GEN. AIR OUT	132.18	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.59	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.49	DEG.	F	ALM
C	22	GEN. EXCITER	130.61	DEG.	F	ALM
C	23	GEN. VOLT. REG.	122.63	DEG.	F	ALM
C	24	CONTROL PANEL	128.49	DEG.	F	ALM
C	25	RELAY AREA	126.45	DEG.	F	ALM
C	26	BATTERY LEFT	110.38	DEG.	F	ALM
C	27	BATTERY RIGHT	111.62	DEG.	F	ALM
C	28	AIR IN SET	124.93	DEG.	F	ALM
C	29	FUEL TANK	95.982	DEG.	F	ALM
C	30	FUEL OUTLET	142.46	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:40:26

STOPPED SINGLE SCAN 14 NOV 87 11:40:26

BEGIN SCAN GROUP 1 14 NOV 87 11:45:55
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	703.00	DEG.	F	ALM
C	2	EXHAUST 2	712.29	DEG.	F	ALM
C	3	EXHAUST 3	722.72	DEG.	F	ALM
C	4	EXHAUST 4	690.13	DEG.	F	ALM
C	5	EXHAUST 5	696.62	DEG.	F	ALM
C	6	EXHAUST 6	671.99	DEG.	F	ALM
C	7	ENG. COOL. IN	178.81	DEG.	F	ALM
C	8	ENG. COOL. OUT	186.46	DEG.	F	ALM
C	9	OIL SUMP	203.83	DEG.	F	ALM
C	10	OIL GALLERY	216.25	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.79	DEG.	F	ALM
C	14	RAD. TOP LEFT	139.63	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.32	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.92	DEG.	F	ALM
C	17	RAD. BTM RIGHT	139.85	DEG.	F	ALM
C	18	GEN. AIR IN	124.33	DEG.	F	ALM
C	19	GEN. AIR OUT	133.47	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.22	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.25	DEG.	F	ALM
C	22	GEN. EXCITER	130.66	DEG.	F	ALM
C	23	GEN. VOLT. REG.	124.08	DEG.	F	ALM
C	24	CONTROL PANEL	129.49	DEG.	F	ALM
C	25	RELAY AREA	126.91	DEG.	F	ALM
C	26	BATTERY LEFT	111.48	DEG.	F	ALM
C	27	BATTERY RIGHT	112.78	DEG.	F	ALM
C	28	AIR IN SET	125.64	DEG.	F	ALM
C	29	FUEL TANK	97.090	DEG.	F	ALM
C	30	FUEL OUTLET	144.09	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:46:05

STOPPED SINGLE SCAN 14 NOV 87 11:46:05

BEGIN SCAN GROUP 1 14 NOV 87 11:46:32
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	725.37	DEG.	F	ALM
C	2	EXHAUST 2	735.48	DEG.	F	ALM
C	3	EXHAUST 3	750.68	DEG.	F	ALM
C	4	EXHAUST 4	718.66	DEG.	F	ALM
C	5	EXHAUST 5	720.66	DEG.	F	ALM
C	6	EXHAUST 6	699.45	DEG.	F	ALM
C	7	ENG. COOL. IN	182.65	DEG.	F	ALM
C	8	ENG. COOL. OUT	190.05	DEG.	F	ALM
C	9	OIL SUMP	204.38	DEG.	F	ALM
C	10	OIL GALLERY	216.62	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.97	DEG.	F	ALM
C	14	RAD. TOP LEFT	140.65	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.76	DEG.	F	ALM
C	16	RAD. TOP RIGHT	138.49	DEG.	F	ALM
C	17	RAD. BTM RIGHT	140.51	DEG.	F	ALM
C	18	GEN. AIR IN	124.51	DEG.	F	ALM
C	19	GEN. AIR OUT	134.19	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.31	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.39	DEG.	F	ALM
C	22	GEN. EXCITER	131.08	DEG.	F	ALM
C	23	GEN. VOLT. REG.	124.19	DEG.	F	ALM
C	24	CONTROL PANEL	129.50	DEG.	F	ALM
C	25	RELAY AREA	127.07	DEG.	F	ALM
C	26	BATTERY LEFT	111.44	DEG.	F	ALM
C	27	BATTERY RIGHT	112.98	DEG.	F	ALM
C	28	AIR IN SET	125.58	DEG.	F	ALM
C	29	FUEL TANK	97.227	DEG.	F	ALM
C	30	FUEL OUTLET	143.58	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:46:42

STOPPED SINGLE SCAN 14 NOV 87 11:46:42

BEGIN SCAN GROUP 1 14 NOV 87 11:52:20
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	732.38	DEG.	F	ALM
C	2	EXHAUST 2	744.00	DEG.	F	ALM
C	3	EXHAUST 3	762.30	DEG.	F	ALM
C	4	EXHAUST 4	729.66	DEG.	F	ALM
C	5	EXHAUST 5	729.36	DEG.	F	ALM
C	6	EXHAUST 6	706.05	DEG.	F	ALM
C	7	ENG. COOL. IN	184.65	DEG.	F	ALM
C	8	ENG. COOL. OUT	192.00	DEG.	F	ALM
C	9	OIL SUMP	205.03	DEG.	F	ALM
C	10	OIL GALLERY	217.20	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.48	DEG.	F	ALM
C	14	RAD. TOP LEFT	141.24	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.97	DEG.	F	ALM
C	16	RAD. TOP RIGHT	139.00	DEG.	F	ALM
C	17	RAD. BTM RIGHT	140.93	DEG.	F	ALM
C	18	GEN. AIR IN	125.01	DEG.	F	ALM
C	19	GEN. AIR OUT	135.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.28	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.55	DEG.	F	ALM
C	22	GEN. EXCITER	130.71	DEG.	F	ALM
C	23	GEN. VOLT. REG.	125.13	DEG.	F	ALM
C	24	CONTROL PANEL	129.83	DEG.	F	ALM
C	25	RELAY AREA	127.30	DEG.	F	ALM
C	26	BATTERY LEFT	112.39	DEG.	F	ALM
C	27	BATTERY RIGHT	114.92	DEG.	F	ALM
C	28	AIR IN SET	126.11	DEG.	F	ALM
C	29	FUEL TANK	98.475	DEG.	F	ALM
C	30	FUEL OUTLET	144.14	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:52:30

STOPPED SINGLE SCAN 14 NOV 87 11:52:30

BEGIN SCAN GROUP 1 14 NOV 87 11:55:32
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	705.98	DEG.	F	ALM
C	2	EXHAUST 2	714.27	DEG.	F	ALM
C	3	EXHAUST 3	726.52	DEG.	F	ALM
C	4	EXHAUST 4	700.87	DEG.	F	ALM
C	5	EXHAUST 5	703.59	DEG.	F	ALM
C	6	EXHAUST 6	679.59	DEG.	F	ALM
C	7	ENG. COOL. IN	181.22	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.08	DEG.	F	ALM
C	9	OIL SUMP	205.89	DEG.	F	ALM
C	10	OIL GALLERY	217.91	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.48	DEG.	F	ALM
C	14	RAD. TOP LEFT	140.09	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.57	DEG.	F	ALM
C	16	RAD. TOP RIGHT	138.00	DEG.	F	ALM
C	17	RAD. BTM RIGHT	140.74	DEG.	F	ALM
C	18	GEN. AIR IN	123.63	DEG.	F	ALM
C	19	GEN. AIR OUT	134.43	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.76	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.43	DEG.	F	ALM
C	22	GEN. EXCITER	130.59	DEG.	F	ALM
C	23	GEN. VOLT. REG.	125.06	DEG.	F	ALM
C	24	CONTROL PANEL	130.39	DEG.	F	ALM
C	25	RELAY AREA	126.04	DEG.	F	ALM
C	26	BATTERY LEFT	113.09	DEG.	F	ALM
C	27	BATTERY RIGHT	115.95	DEG.	F	ALM
C	28	AIR IN SET	125.20	DEG.	F	ALM
C	29	FUEL TANK	99.129	DEG.	F	ALM
C	30	FUEL OUTLET	145.53	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:55:42

STOPPED SINGLE SCAN 14 NOV 87 11:55:42

BEGIN SCAN GROUP 1 14 NOV 87 11:56:50
30KW 60HZ GEN SET 54NR25 3774

C	1	EXHAUST 1	744.63	DEG.	F	ALM
C	2	EXHAUST 2	753.38	DEG.	F	ALM
C	3	EXHAUST 3	772.25	DEG.	F	ALM
C	4	EXHAUST 4	748.72	DEG.	F	ALM
C	5	EXHAUST 5	743.98	DEG.	F	ALM
C	6	EXHAUST 6	722.25	DEG.	F	ALM
C	7	ENG. COOL. IN	187.23	DEG.	F	ALM
C	8	ENG. COOL. OUT	194.27	DEG.	F	ALM
C	9	OIL SUMP	286.76	DEG.	F	ALM
C	10	OIL GALLERY	218.84	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	129.55	DEG.	F	ALM
C	14	RAD. TOP LEFT	141.73	DEG.	F	ALM
C	15	RAD. BTM LEFT	138.58	DEG.	F	ALM
C	16	RAD. TOP RIGHT	139.66	DEG.	F	ALM
C	17	RAD. BTM RIGHT	141.78	DEG.	F	ALM
C	18	GEN. AIR IN	123.65	DEG.	F	ALM
C	19	GEN. AIR OUT	135.51	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.85	DEG.	F	ALM
C	21	GEN. FRAME BTM	128.64	DEG.	F	ALM
C	22	GEN. EXCITER	138.82	DEG.	F	ALM
C	23	GEN. VOLT. REG.	126.83	DEG.	F	ALM
C	24	CONTROL PANEL	138.39	DEG.	F	ALM
C	25	RELAY AREA	127.83	DEG.	F	ALM
C	26	BATTERY LEFT	113.21	DEG.	F	ALM
C	27	BATTERY RIGHT	116.79	DEG.	F	ALM
C	28	AIR IN SET	125.22	DEG.	F	ALM
C	29	FUEL TANK	99.427	DEG.	F	ALM
C	30	FUEL OUTLET	145.73	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 11:57:00

STOPPED SINGLE SCAN 14 NOV 87 11:57:00

TEST DATA

ITEM 30 KW COME

GENERATOR SET

MODIFIED

MFR. LIBBY WELDING

MODEL NO. ME2 005A

SERIAL NO. RZ 5 3774

MTS

National
Technical
SystemsScientific
Services
GroupTesting Division
P.O. Box 38
Hartwood, Virginia 22471

Tel. 703 752 5300

710.1.3.2 (F)(4)

REF. NO. MIL-STD 705 512.2

SHEET 1 OF 2

DATE 14 NOV 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER C.C. B.V. K.M.

CIRCUIT INTERRUPTER (OVERLOAD)

INST TIME	STEP NO.	LOAD STEP	E60280 VOLTAGE			E60400 AMPERES X 40			E62300 KILOWATTS X 40			POWER FACTOR	FREQ. Hz	E61400 EXCITER FIELD		AMB. TEMP. °F	PRESS INCHES IN 4000
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw			VOLTS VDC	AMPS DCA		
1351		STARTED	UNIT	UNIT	UNIT												
1401		SHUT DOWN	UNIT	UNIT	UNIT												
1432		STARTED	UNIT	UNIT	UNIT												
1440		R/L	120	121	120.5	2.5	2.55	2.55	.247	.251	.25	.79	60	9.8	3.6	122	12.2
1450		R/L	120	121	120.4	2.5	2.55	2.55	.248	.251	.25	.79	59.5	9.8	3.6	123	12.3
1500		R/L	120	121	120.1	2.5	2.55	2.55	.248	.252	.25	.79	59.9	9.8	3.6	123	12.3
1510		R/L	120	121	120.3	2.5	2.55	2.55	.248	.251	.25	.79	59.9	9.8	3.6	127	12.7
1512		APPLIED	120.70	120.70	CURRENT TO ALL 3 PHASES				.24	.25	.249	.59	59.7	12.5	4.8	123	13.0
1512			119	121	120	2.25	3.34	3.35	.24	.252	.25	.59	59.6	13.3	4.5	123	13.1
1515			119	120.6	120	2.51	3.59	3.55	.248	.252	.25	.59	59.6	13.3	4.5	123	13.1
1522		CIRCUIT INTERRUPTER OPENED AFTER 5 MIN							SEC.					OVERLOAD INDICATOR			
1527		APPLIED R/L FOR COLD DOWN							.248	.25	.25	.79	59.9	9.8	3.6	123	13.1
1640		R/L	120	121.1	120.1	2.5	2.55	2.55	.248	.252	.25						
1542		APPLIED	130.70	130.70	CURRENT TO L1				.272	.251	.252	.70	59.5	10.6	4.0	123	13.1
1542			109.5	121	121	3.3	2.55	2.56	.278	.251	.252	.71	59.5	10.7	4.0	124	13.0
1548			109.1	121	121	3.3	2.55	2.56	.278	.251	.252	.71	59.5	10.7	4.0	124	13.0
1552		CIRCUIT INTERRUPTER OPENED AFTER 9 MIN							MIN.	.53	SEC.			OVERLOAD INDICATOR			
1555		APPLIED R/L FOR COLD DOWN							.248	.252	.25	.79	59.9	9.8	3.6	123	13.4
1556		R/L	120	121	120.1	2.51	2.55	2.55	.248	.252	.25	.79	59.9	9.8	3.6	123	13.4
1610		APPLIED	130.5	117	120.5	2.53	2.31	2.55	.25	.252	.25	.705	59.6	10.7	3.9	124	12.0
1610			120.5	117	120.3	2.54	2.3	2.6	.25	.252	.25	.71	59.5	10.6	4.0	127	12.0
1615			120.5	117	120.3	2.54	2.3	2.6	.25	.252	.25	.71	59.5	10.6	4.0	127	12.0
1619		CIRCUIT INTERRUPTER OPENED AFTER 9 MIN							SEC.								
1622		APPLIED R/L FOR COLD DOWN							.248	.252	.25	.79	59.9	9.8	3.6	127	13.4
1625		R/L	120	121	120.5	2.5	2.55	2.55	.248	.252	.25	.79	59.9	9.8	3.6	127	13.4
1625		CONTINUE ON NEXT PAGE															

TEST FAILURE SEE PAGE 2, INDICATOR FOR L2 OVERLOAD WAS NOT OBSERVED

NOTES:

NAS

REF. NO. MIL-STD 705 METHOD 512.2
SHEET 2 OF 2
DATE 14 NOV 1987
JOB NO. 555-2160
PROJ. ENGR.
RECORDER/OBSERVER CC/AT/KM

ITEM 30 KW 60Hz
GENERATOR SET
MODIFIED
MFGR. KIMBY WELDING
MODEL NO. MEO 005A
SERIAL NO. RZS 3074

National Technical Systems
Scientific Services Group
Testing Division
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

210.1.3.2 (C)(4)

CIRCUIT INTERRUPTER (OVERLOAD)

INST TIME	STEP NO.	LOAD STEP	E 60250 VOLTAGE			E 60400 AMPERES X40			E 62300 KILOWATTS X40			E 62400 POWER FACTOR	E 62400 FREQ. Hz	E 61500 EXCITER FIELD		AMB. TEMP. °F	PRESS. IN. Hg
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0			VOLTS	AMPS		
			VAC	VAC	VAC	AC AMP	AC AMP	AC AMP	Kw	Kw	Kw	PF		VDC	DC		
1637		APPLIED	123	125	119	2.55	2.65	3.32	.26	.27	.291	.71	55.3	11.4	4.2	122	12.5 41.2
1637			123	125	119	2.58	2.65	3.21	.26	.27	.292	.71	55.3	11.5	4.2	124	12.5 41.2
1643		UNIT SHUT DOWN				ON	ON	ON	6 MIN	07 SEC.							
1644		STARTED				ON	ON	ON									
1646		REMOVED				ON	ON	ON									
1651		R/L	120	121	120.3	2.49	2.55	2.52	.248	.251	.25	.80	59.8	9.5	3.6	123	12.6 32.1
1652		APPLIED	123.5	126	119	2.41	2.41	3.3	.239	.25	.28	.68	59.6	10.9	4.1	124	13.2 35.3
1654			123.5	126	119	2.41	2.41	3.3	.239	.25	.281	.675	59.7	11.0	4.1	123	13.2 35.3
1654			123.5	126	119	2.41	2.41	3.3	.239	.25	.281	.675	59.7	11.0	4.1	123	13.2 35.3
1700		CIRCUIT INTERRUPTER				OPENED	OPENED	AFTR	10 MIN.	42 SEC.							
1705		APPLIED R/L				DOWN	DOWN										
1706		R/L	120	121.1	120.1	2.45	2.53	2.52	.245	.251	.25	.80	59.5	9.6	3.6	126	13.2 38.1
1707		R/L	120	121	120.5	2.47	2.51	2.5	.248	.252	.25	.80	59.9	9.6	3.6	123	13.2 38.1
1725		APPLIED				CURRENT	TO	LI -									
1726		APPLIED	119.7	121	120	2.7	2.75	2.74	.248	.253	.251	.775	59.8	10.5	4.0	123	13.1 35.3
1726		APPLIED	120	121	120	2.7	2.75	2.74	.248	.252	.251	.721	59.8	10.8	4.0	125	13.1 35.3
1756			119.5	121	120.1	2.7	2.75	2.74	.248	.252	.251	.72	59.7	10.8	4.0	121	14.2 38.9
1826			119.3	121	120.3	2.7	2.75	2.74	.248	.252	.252	.73	59.8	10.8	4.0	123	13.3 35.3
1856			119.2	121	120.1	2.7	2.75	2.74	.248	.252	.251	.732	59.5	10.8	4.0	123	13.3 35.3
1928		SHUT UNIT DOWN				END OF TEST											

NOTES: CIRCUIT INTERRUPTER FAILED TO OPEN IN TIME SPECIFIED WHEN TESTING OVERCURRENT ON L3 IN ACCORDANCE WITH PRECUREMENT DOCUMENT PARA. 3.19.2.4 INTERRUPTER SHOULD OPERATE IN 8 ± 2 min INTERRUPTER TOOK 10 MIN 42 SEC TO OPEN

CIRCUIT INTERRUPTER (OVERLOAD CURRENT) 512.2c

BEGIN SCAN GROUP 1 14 NOV 87 14:39:52
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	777.83	DEG.	F	ALM
C	2	EXHAUST 2	791.56	DEG.	F	ALM
C	3	EXHAUST 3	820.67	DEG.	F	ALM
C	4	EXHAUST 4	778.28	DEG.	F	ALM
C	5	EXHAUST 5	778.43	DEG.	F	ALM
C	6	EXHAUST 6	768.74	DEG.	F	ALM
C	7	ENG. COOL. IN	288.48	DEG.	F	ALM
C	8	ENG. COOL. OUT	288.47	DEG.	F	ALM
C	9	OIL SUMP	216.41	DEG.	F	ALM
C	10	OIL GALLERY	229.46	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.62	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.33	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.34	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.31	DEG.	F	ALM
C	17	RAD. BTM RIGHT	145.48	DEG.	F	ALM
C	18	GEN. AIR IN	128.61	DEG.	F	ALM
C	19	GEN. AIR OUT	142.66	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.45	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.61	DEG.	F	ALM
C	22	GEN. EXCITER	129.67	DEG.	F	ALM
C	23	GEN. VOLT. REG.	139.78	DEG.	F	ALM
C	24	CONTROL PANEL	133.34	DEG.	F	ALM
C	25	RELAY AREA	126.78	DEG.	F	ALM
C	26	BATTERY LEFT	129.94	DEG.	F	ALM
C	27	BATTERY RIGHT	132.32	DEG.	F	ALM
C	28	AIR IN SET	122.26	DEG.	F	ALM
C	29	FUEL TANK	115.89	DEG.	F	ALM
C	30	FUEL OUTLET	158.28	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 14:40:02

STOPPED SINGLE SCAN 14 NOV 87 14:40:02

BEGIN SCAN GROUP 1 14 NOV 87 14:50:53
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	778.98	DEG.	F	ALM
C	2	EXHAUST 2	798.85	DEG.	F	ALM
C	3	EXHAUST 3	816.77	DEG.	F	ALM
C	4	EXHAUST 4	778.38	DEG.	F	ALM
C	5	EXHAUST 5	778.28	DEG.	F	ALM
C	6	EXHAUST 6	766.98	DEG.	F	ALM
C	7	ENG. COOL. IN	281.41	DEG.	F	ALM
C	8	ENG. COOL. OUT	289.47	DEG.	F	ALM
C	9	OIL SUMP	221.85	DEG.	F	ALM
C	10	OIL GALLERY	234.33	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.98	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.77	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.63	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.71	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.38	DEG.	F	ALM
C	18	GEN. AIR IN	128.82	DEG.	F	ALM
C	19	GEN. AIR OUT	142.78	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.17	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.34	DEG.	F	ALM
C	22	GEN. EXCITER	129.41	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.89	DEG.	F	ALM
C	24	CONTROL PANEL	132.58	DEG.	F	ALM
C	25	RELAY AREA	126.47	DEG.	F	ALM
C	26	BATTERY LEFT	131.82	DEG.	F	ALM
C	27	BATTERY RIGHT	134.70	DEG.	F	ALM
C	28	AIR IN SET	122.53	DEG.	F	ALM
C	29	FUEL TANK	116.59	DEG.	F	ALM
C	30	FUEL OUTLET	149.18	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 14:51:03

STOPPED SINGLE SCAN 14 NOV 87 14:51:03

BEGIN SCAN GROUP 1 14 NOV 87 15:00:03
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	774.82	DEG.	F	ALM
C	2	EXHAUST 2	792.12	DEG.	F	ALM
C	3	EXHAUST 3	818.71	DEG.	F	ALM
C	4	EXHAUST 4	781.20	DEG.	F	ALM
C	5	EXHAUST 5	780.86	DEG.	F	ALM
C	6	EXHAUST 6	768.11	DEG.	F	ALM
C	7	ENG. COOL. IN	281.82	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.86	DEG.	F	ALM
C	9	OIL SUMP	222.69	DEG.	F	ALM
C	10	OIL GALLERY	235.92	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.31	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.24	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.21	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.46	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.83	DEG.	F	ALM
C	18	GEN. AIR IN	121.28	DEG.	F	ALM
C	19	GEN. AIR OUT	143.51	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.36	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.44	DEG.	F	ALM
C	22	GEN. EXCITER	138.14	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.46	DEG.	F	ALM
C	24	CONTROL PANEL	132.25	DEG.	F	ALM
C	25	RELAY AREA	126.76	DEG.	F	ALM
C	26	BATTERY LEFT	133.12	DEG.	F	ALM
C	27	BATTERY RIGHT	136.94	DEG.	F	ALM
C	28	AIR IN SET	122.92	DEG.	F	ALM
C	29	FUEL TANK	117.18	DEG.	F	ALM
C	30	FUEL OUTLET	149.65	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:00:13

STOPPED SINGLE SCAN 14 NOV 87 15:00:13

BEGIN SCAN GROUP 1 14 NOV 87 15:08:15
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	777.49	DEG.	F	ALM
C	2	EXHAUST 2	792.18	DEG.	F	ALM
C	3	EXHAUST 3	817.45	DEG.	F	ALM
C	4	EXHAUST 4	779.32	DEG.	F	ALM
C	5	EXHAUST 5	781.84	DEG.	F	ALM
C	6	EXHAUST 6	771.48	DEG.	F	ALM
C	7	ENG. COOL. IN	282.19	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.59	DEG.	F	ALM
C	9	OIL SUMP	223.19	DEG.	F	ALM
C	10	OIL GALLERY	236.66	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.55	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.26	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.48	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.58	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.12	DEG.	F	ALM
C	18	GEN. AIR IN	121.15	DEG.	F	ALM
C	19	GEN. AIR OUT	143.68	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.46	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.68	DEG.	F	ALM
C	22	GEN. EXCITER	138.16	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.23	DEG.	F	ALM
C	24	CONTROL PANEL	132.36	DEG.	F	ALM
C	25	RELAY AREA	126.70	DEG.	F	ALM
C	26	BATTERY LEFT	134.86	DEG.	F	ALM
C	27	BATTERY RIGHT	138.79	DEG.	F	ALM
C	28	AIR IN SET	122.52	DEG.	F	ALM
C	29	FUEL TANK	117.68	DEG.	F	ALM
C	30	FUEL OUTLET	149.69	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:09:25

STOPPED SINGLE SCAN 14 NOV 87 15:09:25

BEGIN SCAN GROUP 1 14 NOV 87 15:13:51
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	807.61	DEG.	F	ALM
C	2	EXHAUST 2	822.46	DEG.	F	ALM
C	3	EXHAUST 3	853.80	DEG.	F	ALM
C	4	EXHAUST 4	811.72	DEG.	F	ALM
C	5	EXHAUST 5	817.63	DEG.	F	ALM
C	6	EXHAUST 6	808.85	DEG.	F	ALM
C	7	ENG. COOL. IN	204.15	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.44	DEG.	F	ALM
C	9	OIL SUMP	224.22	DEG.	F	ALM
C	10	OIL GALLERY	237.37	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.92	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.32	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.83	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.31	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.82	DEG.	F	ALM
C	18	GEN. AIR IN	121.23	DEG.	F	ALM
C	19	GEN. AIR OUT	146.93	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.88	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.85	DEG.	F	ALM
C	22	GEN. EXCITER	138.48	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.15	DEG.	F	ALM
C	24	CONTROL PANEL	132.33	DEG.	F	ALM
C	25	RELAY AREA	127.22	DEG.	F	ALM
C	26	BATTERY LEFT	134.53	DEG.	F	ALM
C	27	BATTERY RIGHT	138.68	DEG.	F	ALM
C	28	AIR IN SET	123.82	DEG.	F	ALM
C	29	FUEL TANK	118.89	DEG.	F	ALM
C	30	FUEL OUTLET	158.88	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:14:01

STOPPED SINGLE SCAN 14 NOV 87 15:14:01

BEGIN SCAN GROUP 1 14 NOV 87 15:40:57
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	779.81	DEG.	F	ALM
C	2	EXHAUST 2	797.38	DEG.	F	ALM
C	3	EXHAUST 3	817.46	DEG.	F	ALM
C	4	EXHAUST 4	781.22	DEG.	F	ALM
C	5	EXHAUST 5	788.44	DEG.	F	ALM
C	6	EXHAUST 6	769.44	DEG.	F	ALM
C	7	ENG. COOL. IN	201.57	DEG.	F	ALM
C	8	ENG. COOL. OUT	209.59	DEG.	F	ALM
C	9	OIL SUMP	228.37	DEG.	F	ALM
C	10	OIL GALLERY	233.65	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.98	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.36	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.72	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.75	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.31	DEG.	F	ALM
C	18	GEN. AIR IN	121.35	DEG.	F	ALM
C	19	GEN. AIR OUT	144.11	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.87	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.88	DEG.	F	ALM
C	22	GEN. EXCITER	138.68	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.39	DEG.	F	ALM
C	24	CONTROL PANEL	131.98	DEG.	F	ALM
C	25	RELAY AREA	127.10	DEG.	F	ALM
C	26	BATTERY LEFT	137.89	DEG.	F	ALM
C	27	BATTERY RIGHT	142.31	DEG.	F	ALM
C	28	AIR IN SET	123.29	DEG.	F	ALM
C	29	FUEL TANK	119.61	DEG.	F	ALM
C	30	FUEL OUTLET	158.32	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:41:07

STOPPED SINGLE SCAN 14 NOV 87 15:41:07

BEGIN SCAN GROUP 1 14 NOV 87 15:42:51
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	802.79	DEG.	F	ALM
C	2	EXHAUST 2	821.16	DEG.	F	ALM
C	3	EXHAUST 3	846.35	DEG.	F	ALM
C	4	EXHAUST 4	806.35	DEG.	F	ALM
C	5	EXHAUST 5	816.51	DEG.	F	ALM
C	6	EXHAUST 6	808.46	DEG.	F	ALM
C	7	ENG. COOL. IN	202.56	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.79	DEG.	F	ALM
C	9	OIL SUMP	221.27	DEG.	F	ALM
C	10	OIL GALLERY	234.36	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.82	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.77	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.77	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.14	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.34	DEG.	F	ALM
C	18	GEN. AIR IN	121.75	DEG.	F	ALM
C	19	GEN. AIR OUT	144.43	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.98	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.85	DEG.	F	ALM
C	22	GEN. EXCITER	138.53	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.49	DEG.	F	ALM
C	24	CONTROL PANEL	132.21	DEG.	F	ALM
C	25	RELAY AREA	127.25	DEG.	F	ALM
C	26	BATTERY LEFT	137.29	DEG.	F	ALM
C	27	BATTERY RIGHT	142.85	DEG.	F	ALM
C	28	AIR IN SET	123.39	DEG.	F	ALM
C	29	FUEL TANK	119.71	DEG.	F	ALM
C	30	FUEL OUTLET	149.54	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:43:01

STOPPED SINGLE SCAN 14 NOV 87 15:43:01

BEGIN SCAN GROUP 1 14 NOV 87 15:46:43
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	887.94	DEG.	F	ALM
C	2	EXHAUST 2	827.62	DEG.	F	ALM
C	3	EXHAUST 3	852.18	DEG.	F	ALM
C	4	EXHAUST 4	813.29	DEG.	F	ALM
C	5	EXHAUST 5	825.69	DEG.	F	ALM
C	6	EXHAUST 6	809.11	DEG.	F	ALM
C	7	ENG. COOL. IN	204.43	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.83	DEG.	F	ALM
C	9	OIL SUMP	222.44	DEG.	F	ALM
C	10	OIL GALLERY	235.81	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.41	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.82	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.88	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.22	DEG.	F	ALM
C	18	GEN. AIR IN	121.55	DEG.	F	ALM
C	19	GEN. AIR OUT	145.41	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.22	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.33	DEG.	F	ALM
C	22	GEN. EXCITER	131.88	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.49	DEG.	F	ALM
C	24	CONTROL PANEL	132.33	DEG.	F	ALM
C	25	RELAY AREA	127.76	DEG.	F	ALM
C	26	BATTERY LEFT	137.75	DEG.	F	ALM
C	27	BATTERY RIGHT	142.37	DEG.	F	ALM
C	28	AIR IN SET	123.56	DEG.	F	ALM
C	29	FUEL TANK	119.58	DEG.	F	ALM
C	30	FUEL OUTLET	151.38	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:46:53

STOPPED SINGLE SCAN 14 NOV 87 15:46:53

BEGIN SCAN GROUP 1 14 NOV 87 15:55:03
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	622.48	DEG.	F	ALM
2	EXHAUST 2	627.78	DEG.	F	ALM
3	EXHAUST 3	642.68	DEG.	F	ALM
4	EXHAUST 4	636.26	DEG.	F	ALM
5	EXHAUST 5	646.56	DEG.	F	ALM
6	EXHAUST 6	622.88	DEG.	F	ALM
7	ENG. COOL. IN	187.83	DEG.	F	ALM
8	ENG. COOL. OUT	193.48	DEG.	F	ALM
9	OIL SUMP	221.39	DEG.	F	ALM
10	OIL GALLERY	234.46	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.26	DEG.	F	ALM
14	RAD. TOP LEFT	143.88	DEG.	F	ALM
15	RAD. BTM LEFT	148.63	DEG.	F	ALM
16	RAD. TOP RIGHT	142.86	DEG.	F	ALM
17	RAD. BTM RIGHT	144.78	DEG.	F	ALM
18	GEN. AIR IN	121.83	DEG.	F	ALM
19	GEN. AIR OUT	141.93	DEG.	F	ALM
20	GEN. FRAME TOP	138.46	DEG.	F	ALM
21	GEN. FRAME BTM	126.45	DEG.	F	ALM
22	GEN. EXCITER	138.27	DEG.	F	ALM
23	GEN. VOLT. REG.	133.78	DEG.	F	ALM
24	CONTROL PANEL	132.77	DEG.	F	ALM
25	RELAY AREA	126.89	DEG.	F	ALM
26	BATTERY LEFT	138.88	DEG.	F	ALM
27	BATTERY RIGHT	142.82	DEG.	F	ALM
28	AIR IN SET	124.12	DEG.	F	ALM
29	FUEL TANK	128.35	DEG.	F	ALM
30	FUEL OUTLET	152.98	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:55:13

STOPPED SINGLE SCAN 14 NOV 87 15:55:13

BEGIN SCAN GROUP 1 14 NOV 87 16:08:13
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	777.55	DEG.	F	ALM
2	EXHAUST 2	795.24	DEG.	F	ALM
3	EXHAUST 3	816.88	DEG.	F	ALM
4	EXHAUST 4	788.25	DEG.	F	ALM
5	EXHAUST 5	786.88	DEG.	F	ALM
6	EXHAUST 6	769.53	DEG.	F	ALM
7	ENG. COOL. IN	282.85	DEG.	F	ALM
8	ENG. COOL. OUT	218.20	DEG.	F	ALM
9	OIL SUMP	222.38	DEG.	F	ALM
10	OIL GALLERY	235.12	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.84	DEG.	F	ALM
14	RAD. TOP LEFT	147.69	DEG.	F	ALM
15	RAD. BTM LEFT	142.78	DEG.	F	ALM
16	RAD. TOP RIGHT	144.94	DEG.	F	ALM
17	RAD. BTM RIGHT	147.43	DEG.	F	ALM
18	GEN. AIR IN	122.18	DEG.	F	ALM
19	GEN. AIR OUT	144.12	DEG.	F	ALM
20	GEN. FRAME TOP	129.89	DEG.	F	ALM
21	GEN. FRAME BTM	126.12	DEG.	F	ALM
22	GEN. EXCITER	138.67	DEG.	F	ALM
23	GEN. VOLT. REG.	133.46	DEG.	F	ALM
24	CONTROL PANEL	132.42	DEG.	F	ALM
25	RELAY AREA	127.43	DEG.	F	ALM
26	BATTERY LEFT	136.75	DEG.	F	ALM
27	BATTERY RIGHT	145.81	DEG.	F	ALM
28	AIR IN SET	123.95	DEG.	F	ALM
29	FUEL TANK	121.88	DEG.	F	ALM
30	FUEL OUTLET	158.91	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:09:23

BEGIN SCAN GROUP 1 14 NOV 87 16:10:00
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	806.49	DEG.	F	ALM
2	EXHAUST 2	819.47	DEG.	F	ALM
3	EXHAUST 3	842.44	DEG.	F	ALM
4	EXHAUST 4	818.98	DEG.	F	ALM
5	EXHAUST 5	818.23	DEG.	F	ALM
6	EXHAUST 6	799.89	DEG.	F	ALM
7	ENG. COOL. IN	282.86	DEG.	F	ALM
8	ENG. COOL. OUT	211.29	DEG.	F	ALM
9	OIL SUMP	222.91	DEG.	F	ALM
10	OIL GALLERY	235.56	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.98	DEG.	F	ALM
14	RAD. TOP LEFT	148.87	DEG.	F	ALM
15	RAD. BTM LEFT	143.16	DEG.	F	ALM
16	RAD. TOP RIGHT	145.18	DEG.	F	ALM
17	RAD. BTM RIGHT	147.73	DEG.	F	ALM
18	GEN. AIR IN	122.48	DEG.	F	ALM
19	GEN. AIR OUT	144.82	DEG.	F	ALM
20	GEN. FRAME TOP	138.88	DEG.	F	ALM
21	GEN. FRAME BTM	126.15	DEG.	F	ALM
22	GEN. EXCITER	138.55	DEG.	F	ALM
23	GEN. VOLT. REG.	133.42	DEG.	F	ALM
24	CONTROL PANEL	132.37	DEG.	F	ALM
25	RELAY AREA	127.47	DEG.	F	ALM
26	BATTERY LEFT	139.98	DEG.	F	ALM
27	BATTERY RIGHT	145.14	DEG.	F	ALM
28	AIR IN SET	123.98	DEG.	F	ALM
29	FUEL TANK	121.11	DEG.	F	ALM
30	FUEL OUTLET	151.53	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:10:18

STOPPED SINGLE SCAN 14 NOV 87 16:10:18

BEGIN SCAN GROUP 1 14 NOV 87 16:14:09
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	889.81	DEG.	F	ALM
2	EXHAUST 2	828.72	DEG.	F	ALM
3	EXHAUST 3	858.22	DEG.	F	ALM
4	EXHAUST 4	818.46	DEG.	F	ALM
5	EXHAUST 5	826.74	DEG.	F	ALM
6	EXHAUST 6	888.78	DEG.	F	ALM
7	ENG. COOL. IN	285.12	DEG.	F	ALM
8	ENG. COOL. OUT	213.57	DEG.	F	ALM
9	OIL SUMP	223.66	DEG.	F	ALM
10	OIL GALLERY	236.96	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.51	DEG.	F	ALM
14	RAD. TOP LEFT	148.99	DEG.	F	ALM
15	RAD. BTM LEFT	143.92	DEG.	F	ALM
16	RAD. TOP RIGHT	146.85	DEG.	F	ALM
17	RAD. BTM RIGHT	148.48	DEG.	F	ALM
18	GEN. AIR IN	121.87	DEG.	F	ALM
19	GEN. AIR OUT	145.64	DEG.	F	ALM
20	GEN. FRAME TOP	138.36	DEG.	F	ALM
21	GEN. FRAME BTM	126.52	DEG.	F	ALM
22	GEN. EXCITER	131.21	DEG.	F	ALM
23	GEN. VOLT. REG.	133.66	DEG.	F	ALM
24	CONTROL PANEL	132.79	DEG.	F	ALM
25	RELAY AREA	127.69	DEG.	F	ALM
26	BATTERY LEFT	148.48	DEG.	F	ALM
27	BATTERY RIGHT	145.21	DEG.	F	ALM
28	AIR IN SET	123.54	DEG.	F	ALM
29	FUEL TANK	121.93	DEG.	F	ALM
30	FUEL OUTLET	158.72	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:14:19

BEGIN SCAN GROUP 1 14 NOV 87 16:27:27
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	788.40	DEG.	F	ALM
2	EXHAUST 2	788.43	DEG.	F	ALM
3	EXHAUST 3	816.55	DEG.	F	ALM
4	EXHAUST 4	778.81	DEG.	F	ALM
5	EXHAUST 5	787.47	DEG.	F	ALM
6	EXHAUST 6	767.31	DEG.	F	ALM
7	ENG. COOL. IN	283.88	DEG.	F	ALM
8	ENG. COOL. OUT	211.88	DEG.	F	ALM
9	OIL SUMP	223.88	DEG.	F	ALM
10	OIL GALLERY	235.96	DEG.	F	ALM
11		.88888			
12		.88888			
13	ENG. INTAKE	134.21	DEG.	F	ALM
14	RAD. TOP LEFT	149.78	DEG.	F	ALM
15	RAD. BTM LEFT	145.31	DEG.	F	ALM
16	RAD. TOP RIGHT	147.88	DEG.	F	ALM
17	RAD. BTM RIGHT	149.67	DEG.	F	ALM
18	GEN. AIR IN	124.49	DEG.	F	ALM
19	GEN. AIR OUT	146.58	DEG.	F	ALM
20	GEN. FRAME TOP	132.83	DEG.	F	ALM
21	GEN. FRAME BTM	128.63	DEG.	F	ALM
22	GEN. EXCITER	133.88	DEG.	F	ALM
23	GEN. VOLT. REG.	134.57	DEG.	F	ALM
24	CONTROL PANEL	134.86	DEG.	F	ALM
25	RELAY AREA	138.18	DEG.	F	ALM
26	BATTERY LEFT	141.63	DEG.	F	ALM
27	BATTERY RIGHT	145.75	DEG.	F	ALM
28	AIR IN SET	126.56	DEG.	F	ALM
29	FUEL TANK	122.86	DEG.	F	ALM
30	FUEL OUTLET	152.78	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:27:37

STOPPED SINGLE SCAN 14 NOV 87 16:27:37

BEGIN SCAN GROUP 1 14 NOV 87 16:38:29
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	824.91	DEG.	F	ALM
2	EXHAUST 2	856.39	DEG.	F	ALM
3	EXHAUST 3	872.77	DEG.	F	ALM
4	EXHAUST 4	833.52	DEG.	F	ALM
5	EXHAUST 5	848.28	DEG.	F	ALM
6	EXHAUST 6	824.87	DEG.	F	ALM
7	ENG. COOL. IN	284.79	DEG.	F	ALM
8	ENG. COOL. OUT	213.16	DEG.	F	ALM
9	OIL SUMP	224.41	DEG.	F	ALM
10	OIL GALLERY	237.65	DEG.	F	ALM
11		.88888			
12		.88888			
13	ENG. INTAKE	138.94	DEG.	F	ALM
14	RAD. TOP LEFT	148.22	DEG.	F	ALM
15	RAD. BTM LEFT	143.22	DEG.	F	ALM
16	RAD. TOP RIGHT	145.68	DEG.	F	ALM
17	RAD. BTM RIGHT	148.18	DEG.	F	ALM
18	GEN. AIR IN	128.13	DEG.	F	ALM
19	GEN. AIR OUT	144.71	DEG.	F	ALM
20	GEN. FRAME TOP	138.78	DEG.	F	ALM
21	GEN. FRAME BTM	126.91	DEG.	F	ALM
22	GEN. EXCITER	138.61	DEG.	F	ALM
23	GEN. VOLT. REG.	134.28	DEG.	F	ALM
24	CONTROL PANEL	133.44	DEG.	F	ALM
25	RELAY AREA	127.39	DEG.	F	ALM
26	BATTERY LEFT	142.78	DEG.	F	ALM
27	BATTERY RIGHT	146.58	DEG.	F	ALM
28	AIR IN SET	124.96	DEG.	F	ALM
29	FUEL TANK	122.66	DEG.	F	ALM
30	FUEL OUTLET	152.55	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:38:39

STOPPED SINGLE SCAN 14 NOV 87 16:38:39

BEGIN SCAN GROUP 1 14 NOV 87 16:42:46
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	834.97	DEG.	F	ALM
2	EXHAUST 2	855.52	DEG.	F	ALM
3	EXHAUST 3	881.22	DEG.	F	ALM
4	EXHAUST 4	843.74	DEG.	F	ALM
5	EXHAUST 5	861.79	DEG.	F	ALM
6	EXHAUST 6	835.84	DEG.	F	ALM
7	ENG. COOL. IN	287.93	DEG.	F	ALM
8	ENG. COOL. OUT	216.36	DEG.	F	ALM
9	OIL SUMP	226.12	DEG.	F	ALM
10	OIL GALLERY	239.97	DEG.	F	ALM
11		.88888			
12		.88888			
13	ENG. INTAKE	131.88	DEG.	F	ALM
14	RAD. TOP LEFT	158.18	DEG.	F	ALM
15	RAD. BTM LEFT	144.88	DEG.	F	ALM
16	RAD. TOP RIGHT	147.81	DEG.	F	ALM
17	RAD. BTM RIGHT	149.78	DEG.	F	ALM
18	GEN. AIR IN	122.83	DEG.	F	ALM
19	GEN. AIR OUT	147.18	DEG.	F	ALM
20	GEN. FRAME TOP	138.93	DEG.	F	ALM
21	GEN. FRAME BTM	126.86	DEG.	F	ALM
22	GEN. EXCITER	131.47	DEG.	F	ALM
23	GEN. VOLT. REG.	134.25	DEG.	F	ALM
24	CONTROL PANEL	133.35	DEG.	F	ALM
25	RELAY AREA	128.58	DEG.	F	ALM
26	BATTERY LEFT	142.97	DEG.	F	ALM
27	BATTERY RIGHT	146.92	DEG.	F	ALM
28	AIR IN SET	125.23	DEG.	F	ALM
29	FUEL TANK	122.86	DEG.	F	ALM
30	FUEL OUTLET	151.83	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:42:56

STOPPED SINGLE SCAN 14 NOV 87 16:42:56

BEGIN SCAN GROUP 1 14 NOV 87 16:45:53
30KW 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	444.65	DEG.	F	ALM
2	EXHAUST 2	458.51	DEG.	F	ALM
3	EXHAUST 3	478.48	DEG.	F	ALM
4	EXHAUST 4	481.88	DEG.	F	ALM
5	EXHAUST 5	492.53	DEG.	F	ALM
6	EXHAUST 6	462.15	DEG.	F	ALM
7	ENG. COOL. IN	212.21	DEG.	F	ALM
8	ENG. COOL. OUT	218.89	DEG.	F	ALM
9	OIL SUMP	238.62	DEG.	F	ALM
10	OIL GALLERY	234.29	DEG.	F	ALM
11		.88888			
12		.88888			
13	ENG. INTAKE	143.94	DEG.	F	ALM
14	RAD. TOP LEFT	163.78	DEG.	F	ALM
15	RAD. BTM LEFT	153.12	DEG.	F	ALM
16	RAD. TOP RIGHT	153.69	DEG.	F	ALM
17	RAD. BTM RIGHT	157.95	DEG.	F	ALM
18	GEN. AIR IN	123.24	DEG.	F	ALM
19	GEN. AIR OUT	148.77	DEG.	F	ALM
20	GEN. FRAME TOP	136.18	DEG.	F	ALM
21	GEN. FRAME BTM	127.48	DEG.	F	ALM
22	GEN. EXCITER	138.86	DEG.	F	ALM
23	GEN. VOLT. REG.	134.54	DEG.	F	ALM
24	CONTROL PANEL	134.47	DEG.	F	ALM
25	RELAY AREA	136.81	DEG.	F	ALM
26	BATTERY LEFT	143.49	DEG.	F	ALM
27	BATTERY RIGHT	147.35	DEG.	F	ALM
28	AIR IN SET	123.81	DEG.	F	ALM
29	FUEL TANK	123.81	DEG.	F	ALM
30	FUEL OUTLET	151.42	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:46:03

STOPPED SINGLE SCAN 14 NOV 87 16:46:03

BEGIN SCAN GROUP 1 14 NOV 87 16:51:58
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	718.32	DEG.	F	ALM
C	2	EXHAUST 2	738.44	DEG.	F	ALM
C	3	EXHAUST 3	749.89	DEG.	F	ALM
C	4	EXHAUST 4	714.32	DEG.	F	ALM
C	5	EXHAUST 5	716.22	DEG.	F	ALM
C	6	EXHAUST 6	698.82	DEG.	F	ALM
C	7	ENG. COOL. IN	186.87	DEG.	F	ALM
C	8	ENG. COOL. OUT	193.62	DEG.	F	ALM
C	9	OIL SUMP	215.58	DEG.	F	ALM
C	10	OIL GALLERY	223.38	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	129.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	141.86	DEG.	F	ALM
C	15	RAD. BTM LEFT	139.63	DEG.	F	ALM
C	16	RAD. TOP RIGHT	141.65	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.28	DEG.	F	ALM
C	18	GEN. AIR IN	121.24	DEG.	F	ALM
C	19	GEN. AIR OUT	141.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.48	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.16	DEG.	F	ALM
C	22	GEN. EXCITER	129.38	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.57	DEG.	F	ALM
C	24	CONTROL PANEL	133.84	DEG.	F	ALM
C	25	RELAY AREA	126.58	DEG.	F	ALM
C	26	BATTERY LEFT	143.31	DEG.	F	ALM
C	27	BATTERY RIGHT	147.98	DEG.	F	ALM
C	28	AIR IN SET	123.43	DEG.	F	ALM
C	29	FUEL TANK	123.23	DEG.	F	ALM
C	30	FUEL OUTLET	152.88	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:52:89

STOPPED SINGLE SCAN 14 NOV 87 16:52:11

BEGIN SCAN GROUP 1 14 NOV 87 1 12:55
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	738.71	DEG.	F	ALM
C	2	EXHAUST 2	758.13	DEG.	F	ALM
C	3	EXHAUST 3	775.55	DEG.	F	ALM
C	4	EXHAUST 4	735.98	DEG.	F	ALM
C	5	EXHAUST 5	735.97	DEG.	F	ALM
C	6	EXHAUST 6	719.58	DEG.	F	ALM
C	7	ENG. COOL. IN	198.48	DEG.	F	ALM
C	8	ENG. COOL. OUT	197.52	DEG.	F	ALM
C	9	OIL SUMP	215.66	DEG.	F	ALM
C	10	OIL GALLERY	223.23	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	129.31	DEG.	F	ALM
C	14	RAD. TOP LEFT	142.96	DEG.	F	ALM
C	15	RAD. BTM LEFT	139.98	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.85	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.82	DEG.	F	ALM
C	18	GEN. AIR IN	121.68	DEG.	F	ALM
C	19	GEN. AIR OUT	141.73	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.17	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.22	DEG.	F	ALM
C	22	GEN. EXCITER	129.73	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.43	DEG.	F	ALM
C	24	CONTROL PANEL	132.91	DEG.	F	ALM
C	25	RELAY AREA	126.64	DEG.	F	ALM
C	26	BATTERY LEFT	143.28	DEG.	F	ALM
C	27	BATTERY RIGHT	147.62	DEG.	F	ALM
C	28	AIR IN SET	123.43	DEG.	F	ALM
C	29	FUEL TANK	123.22	DEG.	F	ALM
C	30	FUEL OUTLET	151.81	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:53:05

STOPPED SINGLE SCAN 14 NOV 87 16:53:05

BEGIN SCAN GROUP 1 14 NOV 87 16:56:89
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	788.91	DEG.	F	ALM
C	2	EXHAUST 2	736.57	DEG.	F	ALM
C	3	EXHAUST 3	825.87	DEG.	F	ALM
C	4	EXHAUST 4	783.15	DEG.	F	ALM
C	5	EXHAUST 5	798.66	DEG.	F	ALM
C	6	EXHAUST 6	772.66	DEG.	F	ALM
C	7	ENG. COOL. IN	197.74	DEG.	F	ALM
C	8	ENG. COOL. OUT	205.58	DEG.	F	ALM
C	9	OIL SUMP	217.81	DEG.	F	ALM
C	10	OIL GALLERY	238.18	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	138.38	DEG.	F	ALM
C	14	RAD. TOP LEFT	145.75	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.82	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.74	DEG.	F	ALM
C	17	RAD. BTM RIGHT	145.87	DEG.	F	ALM
C	18	GEN. AIR IN	122.54	DEG.	F	ALM
C	19	GEN. AIR OUT	143.69	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.31	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.47	DEG.	F	ALM
C	22	GEN. EXCITER	138.78	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.19	DEG.	F	ALM
C	24	CONTROL PANEL	132.64	DEG.	F	ALM
C	25	RELAY AREA	127.68	DEG.	F	ALM
C	26	BATTERY LEFT	143.28	DEG.	F	ALM
C	27	BATTERY RIGHT	147.36	DEG.	F	ALM
C	28	AIR IN SET	124.51	DEG.	F	ALM
C	29	FUEL TANK	123.36	DEG.	F	ALM
C	30	FUEL OUTLET	151.27	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:56:89

STOPPED SINGLE SCAN 14 NOV 87 16:56:89

BEGIN SCAN GROUP 1 14 NOV 87 17:00:88
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	788.24	DEG.	F	ALM
C	2	EXHAUST 2	887.33	DEG.	F	ALM
C	3	EXHAUST 3	832.45	DEG.	F	ALM
C	4	EXHAUST 4	794.44	DEG.	F	ALM
C	5	EXHAUST 5	883.11	DEG.	F	ALM
C	6	EXHAUST 6	787.72	DEG.	F	ALM
C	7	ENG. COOL. IN	281.67	DEG.	F	ALM
C	8	ENG. COOL. OUT	289.65	DEG.	F	ALM
C	9	OIL SUMP	218.93	DEG.	F	ALM
C	10	OIL GALLERY	232.25	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	138.28	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.77	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.25	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.26	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.68	DEG.	F	ALM
C	18	GEN. AIR IN	121.84	DEG.	F	ALM
C	19	GEN. AIR OUT	144.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.82	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.25	DEG.	F	ALM
C	22	GEN. EXCITER	138.24	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.85	DEG.	F	ALM
C	24	CONTROL PANEL	132.77	DEG.	F	ALM
C	25	RELAY AREA	127.20	DEG.	F	ALM
C	26	BATTERY LEFT	143.56	DEG.	F	ALM
C	27	BATTERY RIGHT	146.41	DEG.	F	ALM
C	28	AIR IN SET	123.39	DEG.	F	ALM
C	29	FUEL TANK	123.51	DEG.	F	ALM
C	30	FUEL OUTLET	152.13	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:00:16

STOPPED SINGLE SCAN 14 NOV 87 17:00:16

BEGIN SCAN GROUP 1 14 NOV 87 17:05:37
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	769.48	DEG.	F	ALM
C	2	EXHAUST 2	723.95	DEG.	F	ALM
C	3	EXHAUST 3	748.65	DEG.	F	ALM
C	4	EXHAUST 4	727.87	DEG.	F	ALM
C	5	EXHAUST 5	738.47	DEG.	F	ALM
C	6	EXHAUST 6	713.35	DEG.	F	ALM
C	7	ENG. COOL. IN	198.82	DEG.	F	ALM
C	8	ENG. COOL. OUT	205.62	DEG.	F	ALM
C	9	OIL SUMP	228.37	DEG.	F	ALM
C	10	OIL GALLERY	233.96	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	129.92	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.36	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.36	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.37	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.69	DEG.	F	ALM
C	18	GEN. AIR IN	121.38	DEG.	F	ALM
C	19	GEN. AIR OUT	143.94	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.95	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.83	DEG.	F	ALM
C	22	GEN. EXCITER	138.36	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.83	DEG.	F	ALM
C	24	CONTROL PANEL	132.55	DEG.	F	ALM
C	25	RELAY AREA	127.18	DEG.	F	ALM
C	26	BATTERY LEFT	143.39	DEG.	F	ALM
C	27	BATTERY RIGHT	147.98	DEG.	F	ALM
C	28	AIR IN SET	123.93	DEG.	F	ALM
C	29	FUEL TANK	123.75	DEG.	F	ALM
C	30	FUEL OUTLET	151.98	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:05:46

STOPPED SINGLE SCAN 14 NOV 87 17:05:46

BEGIN SCAN GROUP 1 14 NOV 87 17:09:14
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	765.35	DEG.	F	ALM
C	2	EXHAUST 2	782.77	DEG.	F	ALM
C	3	EXHAUST 3	888.82	DEG.	F	ALM
C	4	EXHAUST 4	778.99	DEG.	F	ALM
C	5	EXHAUST 5	776.66	DEG.	F	ALM
C	6	EXHAUST 6	756.29	DEG.	F	ALM
C	7	ENG. COOL. IN	199.98	DEG.	F	ALM
C	8	ENG. COOL. OUT	207.86	DEG.	F	ALM
C	9	OIL SUMP	228.96	DEG.	F	ALM
C	10	OIL GALLERY	234.16	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	131.82	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.98	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.58	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.43	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.84	DEG.	F	ALM
C	18	GEN. AIR IN	124.39	DEG.	F	ALM
C	19	GEN. AIR OUT	145.43	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.94	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.81	DEG.	F	ALM
C	22	GEN. EXCITER	132.16	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.95	DEG.	F	ALM
C	24	CONTROL PANEL	132.76	DEG.	F	ALM
C	25	RELAY AREA	128.66	DEG.	F	ALM
C	26	BATTERY LEFT	144.28	DEG.	F	ALM
C	27	BATTERY RIGHT	148.75	DEG.	F	ALM
C	28	AIR IN SET	126.44	DEG.	F	ALM
C	29	FUEL TANK	123.95	DEG.	F	ALM
C	30	FUEL OUTLET	151.55	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:09:24

STOPPED SINGLE SCAN 14 NOV 87 17:09:24

BEGIN SCAN GROUP 1 14 NOV 87 17:24:11
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	776.31	DEG.	F	ALM
C	2	EXHAUST 2	794.48	DEG.	F	ALM
C	3	EXHAUST 3	811.87	DEG.	F	ALM
C	4	EXHAUST 4	777.89	DEG.	F	ALM
C	5	EXHAUST 5	786.16	DEG.	F	ALM
C	6	EXHAUST 6	763.45	DEG.	F	ALM
C	7	ENG. COOL. IN	202.67	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.88	DEG.	F	ALM
C	9	OIL SUMP	223.16	DEG.	F	ALM
C	10	OIL GALLERY	236.61	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	138.73	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.46	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.63	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.83	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.53	DEG.	F	ALM
C	18	GEN. AIR IN	121.34	DEG.	F	ALM
C	19	GEN. AIR OUT	143.81	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.88	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.84	DEG.	F	ALM
C	22	GEN. EXCITER	138.98	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.86	DEG.	F	ALM
C	24	CONTROL PANEL	132.89	DEG.	F	ALM
C	25	RELAY AREA	127.13	DEG.	F	ALM
C	26	BATTERY LEFT	145.29	DEG.	F	ALM
C	27	BATTERY RIGHT	149.49	DEG.	F	ALM
C	28	AIR IN SET	123.57	DEG.	F	ALM
C	29	FUEL TANK	124.69	DEG.	F	ALM
C	30	FUEL OUTLET	158.75	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:24:25

STOPPED SINGLE SCAN 14 NOV 87 17:24:25

BEGIN SCAN GROUP 1 14 NOV 87 17:26:28
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	781.48	DEG.	F	ALM
C	2	EXHAUST 2	888.38	DEG.	F	ALM
C	3	EXHAUST 3	818.43	DEG.	F	ALM
C	4	EXHAUST 4	785.17	DEG.	F	ALM
C	5	EXHAUST 5	794.85	DEG.	F	ALM
C	6	EXHAUST 6	771.31	DEG.	F	ALM
C	7	ENG. COOL. IN	202.77	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.88	DEG.	F	ALM
C	9	OIL SUMP	223.22	DEG.	F	ALM
C	10	OIL GALLERY	236.68	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	138.61	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.51	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.49	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.91	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.47	DEG.	F	ALM
C	18	GEN. AIR IN	126.85	DEG.	F	ALM
C	19	GEN. AIR OUT	143.88	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.87	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.73	DEG.	F	ALM
C	22	GEN. EXCITER	138.33	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.88	DEG.	F	ALM
C	24	CONTROL PANEL	132.76	DEG.	F	ALM
C	25	RELAY AREA	126.88	DEG.	F	ALM
C	26	BATTERY LEFT	145.42	DEG.	F	ALM
C	27	BATTERY RIGHT	149.64	DEG.	F	ALM
C	28	AIR IN SET	122.89	DEG.	F	ALM
C	29	FUEL TANK	124.85	DEG.	F	ALM
C	30	FUEL OUTLET	151.68	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:26:29

STOPPED SINGLE SCAN 14 NOV 87 17:26:29

BEGIN SCAN GROUP 1 14 NOV 87 17:55:54
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	781.92	DEG.	F	ALM
C	2	EXHAUST 2	805.61	DEG.	F	ALM
C	3	EXHAUST 3	825.15	DEG.	F	ALM
C	4	EXHAUST 4	787.17	DEG.	F	ALM
C	5	EXHAUST 5	796.59	DEG.	F	ALM
C	6	EXHAUST 6	776.31	DEG.	F	ALM
C	7	ENG. COOL. IN	205.11	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.44	DEG.	F	ALM
C	9	OIL SUMP	225.52	DEG.	F	ALM
C	10	OIL GALLERY	238.82	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	132.17	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.52	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.89	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.48	DEG.	F	ALM
C	18	GEN. AIR IN	122.98	DEG.	F	ALM
C	19	GEN. AIR OUT	147.92	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.87	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.28	DEG.	F	ALM
C	22	GEN. EXCITER	132.89	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.47	DEG.	F	ALM
C	24	CONTROL PANEL	133.74	DEG.	F	ALM
C	25	RELAY AREA	128.69	DEG.	F	ALM
C	26	BATTERY LEFT	147.42	DEG.	F	ALM
C	27	BATTERY RIGHT	151.26	DEG.	F	ALM
C	28	AIR IN SET	125.28	DEG.	F	ALM
C	29	FUEL TANK	126.28	DEG.	F	ALM
C	30	FUEL OUTLET	153.11	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:56:04

STOPPED SINGLE SCAN 14 NOV 87 17:56:04

BEGIN SCAN GROUP 1 14 NOV 87 18:25:16
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	787.91	DEG.	F	ALM
C	2	EXHAUST 2	863.93	DEG.	F	ALM
C	3	EXHAUST 3	822.97	DEG.	F	ALM
C	4	EXHAUST 4	781.88	DEG.	F	ALM
C	5	EXHAUST 5	792.83	DEG.	F	ALM
C	6	EXHAUST 6	775.38	DEG.	F	ALM
C	7	ENG. COOL. IN	203.13	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.45	DEG.	F	ALM
C	9	OIL SUMP	224.68	DEG.	F	ALM
C	10	OIL GALLERY	238.83	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	129.38	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.83	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.38	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.77	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.18	DEG.	F	ALM
C	18	GEN. AIR IN	119.25	DEG.	F	ALM
C	19	GEN. AIR OUT	145.75	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.79	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.25	DEG.	F	ALM
C	22	GEN. EXCITER	129.28	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.48	DEG.	F	ALM
C	24	CONTROL PANEL	132.14	DEG.	F	ALM
C	25	RELAY AREA	125.84	DEG.	F	ALM
C	26	BATTERY LEFT	148.85	DEG.	F	ALM
C	27	BATTERY RIGHT	153.82	DEG.	F	ALM
C	28	AIR IN SET	121.34	DEG.	F	ALM
C	29	FUEL TANK	127.38	DEG.	F	ALM
C	30	FUEL OUTLET	151.49	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 18:25:25

STOPPED SINGLE SCAN 14 NOV 87 18:25:25

BEGIN SCAN GROUP 1 14 NOV 87 18:55:35
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	786.31	DEG.	F	ALM
C	2	EXHAUST 2	804.73	DEG.	F	ALM
C	3	EXHAUST 3	821.48	DEG.	F	ALM
C	4	EXHAUST 4	781.82	DEG.	F	ALM
C	5	EXHAUST 5	794.25	DEG.	F	ALM
C	6	EXHAUST 6	774.99	DEG.	F	ALM
C	7	ENG. COOL. IN	204.92	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.24	DEG.	F	ALM
C	9	OIL SUMP	225.69	DEG.	F	ALM
C	10	OIL GALLERY	239.14	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	131.59	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.29	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.88	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.14	DEG.	F	ALM
C	18	GEN. AIR IN	121.96	DEG.	F	ALM
C	19	GEN. AIR OUT	147.93	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.56	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.86	DEG.	F	ALM
C	22	GEN. EXCITER	131.44	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.28	DEG.	F	ALM
C	24	CONTROL PANEL	133.48	DEG.	F	ALM
C	25	RELAY AREA	127.93	DEG.	F	ALM
C	26	BATTERY LEFT	158.39	DEG.	F	ALM
C	27	BATTERY RIGHT	155.29	DEG.	F	ALM
C	28	AIR IN SET	124.27	DEG.	F	ALM
C	29	FUEL TANK	128.35	DEG.	F	ALM
C	30	FUEL OUTLET	153.23	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 18:55:45

STOPPED SINGLE SCAN 14 NOV 87 18:55:45

BEGIN SCAN GROUP 1 14 NOV 87 19:24:30
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	782.49	DEG.	F	ALM
C	2	EXHAUST 2	863.45	DEG.	F	ALM
C	3	EXHAUST 3	828.56	DEG.	F	ALM
C	4	EXHAUST 4	781.87	DEG.	F	ALM
C	5	EXHAUST 5	794.92	DEG.	F	ALM
C	6	EXHAUST 6	772.26	DEG.	F	ALM
C	7	ENG. COOL. IN	204.64	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.96	DEG.	F	ALM
C	9	OIL SUMP	225.59	DEG.	F	ALM
C	10	OIL GALLERY	238.78	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	131.13	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.52	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.63	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.28	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.78	DEG.	F	ALM
C	18	GEN. AIR IN	128.85	DEG.	F	ALM
C	19	GEN. AIR OUT	147.26	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.24	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.86	DEG.	F	ALM
C	22	GEN. EXCITER	138.97	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.95	DEG.	F	ALM
C	24	CONTROL PANEL	132.91	DEG.	F	ALM
C	25	RELAY AREA	127.32	DEG.	F	ALM
C	26	BATTERY LEFT	151.68	DEG.	F	ALM
C	27	BATTERY RIGHT	156.92	DEG.	F	ALM
C	28	AIR IN SET	123.37	DEG.	F	ALM
C	29	FUEL TANK	129.15	DEG.	F	ALM
C	30	FUEL OUTLET	152.61	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 19:24:39

STOPPED SINGLE SCAN 14 NOV 87 19:24:40

CIRCUIT INTERRUPTER (OVERLOAD CURRENT) 512.22

BEGIN SCAN GROUP 1 14 NOV 87 14:39:52
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	777.83	DEG.	F	ALM
2	EXHAUST 2	791.56	DEG.	F	ALM
3	EXHAUST 3	820.67	DEG.	F	ALM
4	EXHAUST 4	778.28	DEG.	F	ALM
5	EXHAUST 5	778.43	DEG.	F	ALM
6	EXHAUST 6	768.74	DEG.	F	ALM
7	ENG. COOL. IN	288.40	DEG.	F	ALM
8	ENG. COOL. OUT	288.47	DEG.	F	ALM
9	OIL SUMP	216.41	DEG.	F	ALM
10	OIL GALLERY	229.46	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	129.62	DEG.	F	ALM
14	RAD. TOP LEFT	146.33	DEG.	F	ALM
15	RAD. BTM LEFT	141.34	DEG.	F	ALM
16	RAD. TOP RIGHT	143.31	DEG.	F	ALM
17	RAD. BTM RIGHT	145.48	DEG.	F	ALM
18	GEN. AIR IN	128.61	DEG.	F	ALM
19	GEN. AIR OUT	142.66	DEG.	F	ALM
20	GEN. FRAME TOP	129.45	DEG.	F	ALM
21	GEN. FRAME BTM	125.61	DEG.	F	ALM
22	GEN. EXCITER	129.67	DEG.	F	ALM
23	GEN. VOLT. REG.	135.78	DEG.	F	ALM
24	CONTROL PANEL	133.34	DEG.	F	ALM
25	RELAY AREA	126.78	DEG.	F	ALM
26	BATTERY LEFT	129.94	DEG.	F	ALM
27	BATTERY RIGHT	132.32	DEG.	F	ALM
28	AIR IN SET	122.26	DEG.	F	ALM
29	FUEL TANK	115.89	DEG.	F	ALM
30	FUEL OUTLET	158.28	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 14:48:02

STOPPED SINGLE SCAN 14 NOV 87 14:48:02

BEGIN SCAN GROUP 1 14 NOV 87 14:50:53
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	778.98	DEG.	F	ALM
2	EXHAUST 2	798.85	DEG.	F	ALM
3	EXHAUST 3	816.77	DEG.	F	ALM
4	EXHAUST 4	778.38	DEG.	F	ALM
5	EXHAUST 5	778.28	DEG.	F	ALM
6	EXHAUST 6	766.98	DEG.	F	ALM
7	ENG. COOL. IN	281.41	DEG.	F	ALM
8	ENG. COOL. OUT	289.47	DEG.	F	ALM
9	OIL SUMP	221.85	DEG.	F	ALM
10	OIL GALLERY	234.33	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	129.98	DEG.	F	ALM
14	RAD. TOP LEFT	146.77	DEG.	F	ALM
15	RAD. BTM LEFT	141.63	DEG.	F	ALM
16	RAD. TOP RIGHT	143.71	DEG.	F	ALM
17	RAD. BTM RIGHT	146.38	DEG.	F	ALM
18	GEN. AIR IN	128.82	DEG.	F	ALM
19	GEN. AIR OUT	142.78	DEG.	F	ALM
20	GEN. FRAME TOP	129.17	DEG.	F	ALM
21	GEN. FRAME BTM	125.34	DEG.	F	ALM
22	GEN. EXCITER	129.41	DEG.	F	ALM
23	GEN. VOLT. REG.	134.89	DEG.	F	ALM
24	CONTROL PANEL	132.58	DEG.	F	ALM
25	RELAY AREA	126.47	DEG.	F	ALM
26	BATTERY LEFT	131.82	DEG.	F	ALM
27	BATTERY RIGHT	134.78	DEG.	F	ALM
28	AIR IN SET	122.53	DEG.	F	ALM
29	FUEL TANK	116.59	DEG.	F	ALM
30	FUEL OUTLET	149.18	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 14:51:03

STOPPED SINGLE SCAN 14 NOV 87 14:51:03

BEGIN SCAN GROUP 1 14 NOV 87 15:00:00
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	774.02	DEG.	F	ALM
2	EXHAUST 2	792.12	DEG.	F	ALM
3	EXHAUST 3	818.71	DEG.	F	ALM
4	EXHAUST 4	781.28	DEG.	F	ALM
5	EXHAUST 5	788.86	DEG.	F	ALM
6	EXHAUST 6	768.11	DEG.	F	ALM
7	ENG. COOL. IN	281.82	DEG.	F	ALM
8	ENG. COOL. OUT	218.86	DEG.	F	ALM
9	OIL SUMP	222.69	DEG.	F	ALM
10	OIL GALLERY	235.92	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.31	DEG.	F	ALM
14	RAD. TOP LEFT	147.24	DEG.	F	ALM
15	RAD. BTM LEFT	142.21	DEG.	F	ALM
16	RAD. TOP RIGHT	144.46	DEG.	F	ALM
17	RAD. BTM RIGHT	146.83	DEG.	F	ALM
18	GEN. AIR IN	121.28	DEG.	F	ALM
19	GEN. AIR OUT	143.51	DEG.	F	ALM
20	GEN. FRAME TOP	129.36	DEG.	F	ALM
21	GEN. FRAME BTM	125.44	DEG.	F	ALM
22	GEN. EXCITER	138.14	DEG.	F	ALM
23	GEN. VOLT. REG.	134.46	DEG.	F	ALM
24	CONTROL PANEL	132.25	DEG.	F	ALM
25	RELAY AREA	126.76	DEG.	F	ALM
26	BATTERY LEFT	133.12	DEG.	F	ALM
27	BATTERY RIGHT	136.94	DEG.	F	ALM
28	AIR IN SET	122.92	DEG.	F	ALM
29	FUEL TANK	117.18	DEG.	F	ALM
30	FUEL OUTLET	149.65	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:00:13

STOPPED SINGLE SCAN 14 NOV 87 15:00:13

BEGIN SCAN GROUP 1 14 NOV 87 15:08:15
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	777.49	DEG.	F	ALM
2	EXHAUST 2	792.18	DEG.	F	ALM
3	EXHAUST 3	817.45	DEG.	F	ALM
4	EXHAUST 4	779.32	DEG.	F	ALM
5	EXHAUST 5	781.84	DEG.	F	ALM
6	EXHAUST 6	771.48	DEG.	F	ALM
7	ENG. COOL. IN	282.19	DEG.	F	ALM
8	ENG. COOL. OUT	218.59	DEG.	F	ALM
9	OIL SUMP	223.19	DEG.	F	ALM
10	OIL GALLERY	236.66	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.55	DEG.	F	ALM
14	RAD. TOP LEFT	147.26	DEG.	F	ALM
15	RAD. BTM LEFT	142.48	DEG.	F	ALM
16	RAD. TOP RIGHT	144.58	DEG.	F	ALM
17	RAD. BTM RIGHT	147.12	DEG.	F	ALM
18	GEN. AIR IN	121.15	DEG.	F	ALM
19	GEN. AIR OUT	143.68	DEG.	F	ALM
20	GEN. FRAME TOP	129.46	DEG.	F	ALM
21	GEN. FRAME BTM	125.68	DEG.	F	ALM
22	GEN. EXCITER	138.16	DEG.	F	ALM
23	GEN. VOLT. REG.	134.23	DEG.	F	ALM
24	CONTROL PANEL	132.36	DEG.	F	ALM
25	RELAY AREA	126.78	DEG.	F	ALM
26	BATTERY LEFT	134.86	DEG.	F	ALM
27	BATTERY RIGHT	138.79	DEG.	F	ALM
28	AIR IN SET	122.52	DEG.	F	ALM
29	FUEL TANK	117.68	DEG.	F	ALM
30	FUEL OUTLET	149.69	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:08:25

STOPPED SINGLE SCAN 14 NOV 87 15:08:25

BEGIN SCAN GROUP 1 14 NOV 87 15:13:51
30KW 60HZ GEN SET 5-NR25 3774

C 1	EXHAUST 1	907.61	DEG.	F	ALM
C 2	EXHAUST 2	922.46	DEG.	F	ALM
C 3	EXHAUST 3	953.90	DEG.	F	ALM
C 4	EXHAUST 4	911.72	DEG.	F	ALM
C 5	EXHAUST 5	917.63	DEG.	F	ALM
C 6	EXHAUST 6	909.05	DEG.	F	ALM
C 7	ENG. COOL. IN	204.15	DEG.	F	ALM
C 8	ENG. COOL. OUT	212.44	DEG.	F	ALM
C 9	OIL SUMP	224.22	DEG.	F	ALM
C 10	OIL GALLERY	237.37	DEG.	F	ALM
C 11		.00000			
C 12		.00000			
C 13	ENG. INTAKE	130.92	DEG.	F	ALM
C 14	RAD. TOP LEFT	143.32	DEG.	F	ALM
C 15	RAD. BTM LEFT	143.83	DEG.	F	ALM
C 16	RAD. TOP RIGHT	145.31	DEG.	F	ALM
C 17	RAD. BTM RIGHT	147.82	DEG.	F	ALM
C 18	GEN. AIR IN	121.23	DEG.	F	ALM
C 19	GEN. AIR OUT	146.93	DEG.	F	ALM
C 20	GEN. FRAME TOP	129.98	DEG.	F	ALM
C 21	GEN. FRAME BTM	126.05	DEG.	F	ALM
C 22	GEN. EXCITER	130.49	DEG.	F	ALM
C 23	GEN. VOLT. REG.	134.15	DEG.	F	ALM
C 24	CONTROL PANEL	132.33	DEG.	F	ALM
C 25	RELAY AREA	127.22	DEG.	F	ALM
C 26	BATTERY LEFT	134.53	DEG.	F	ALM
C 27	BATTERY RIGHT	138.68	DEG.	F	ALM
C 28	AIR IN SET	123.82	DEG.	F	ALM
C 29	FUEL TANK	119.89	DEG.	F	ALM
C 30	FUEL OUTLET	150.89	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:14:01

STOPPED SINGLE SCAN 14 NOV 87 15:14:01

BEGIN SCAN GROUP 1 14 NOV 87 15:42:51
30KW 60HZ GEN SET 5-NR25 3774

C 1	EXHAUST 1	902.79	DEG.	F	ALM
C 2	EXHAUST 2	921.16	DEG.	F	ALM
C 3	EXHAUST 3	946.35	DEG.	F	ALM
C 4	EXHAUST 4	906.35	DEG.	F	ALM
C 5	EXHAUST 5	916.51	DEG.	F	ALM
C 6	EXHAUST 6	908.46	DEG.	F	ALM
C 7	ENG. COOL. IN	202.56	DEG.	F	ALM
C 8	ENG. COOL. OUT	210.79	DEG.	F	ALM
C 9	OIL SUMP	221.27	DEG.	F	ALM
C 10	OIL GALLERY	234.36	DEG.	F	ALM
C 11		.00000			
C 12		.00000			
C 13	ENG. INTAKE	130.92	DEG.	F	ALM
C 14	RAD. TOP LEFT	147.77	DEG.	F	ALM
C 15	RAD. BTM LEFT	142.77	DEG.	F	ALM
C 16	RAD. TOP RIGHT	145.14	DEG.	F	ALM
C 17	RAD. BTM RIGHT	147.34	DEG.	F	ALM
C 18	GEN. AIR IN	121.75	DEG.	F	ALM
C 19	GEN. AIR OUT	144.43	DEG.	F	ALM
C 20	GEN. FRAME TOP	129.98	DEG.	F	ALM
C 21	GEN. FRAME BTM	126.05	DEG.	F	ALM
C 22	GEN. EXCITER	130.53	DEG.	F	ALM
C 23	GEN. VOLT. REG.	133.49	DEG.	F	ALM
C 24	CONTROL PANEL	132.21	DEG.	F	ALM
C 25	RELAY AREA	127.25	DEG.	F	ALM
C 26	BATTERY LEFT	137.29	DEG.	F	ALM
C 27	BATTERY RIGHT	142.85	DEG.	F	ALM
C 28	AIR IN SET	123.39	DEG.	F	ALM
C 29	FUEL TANK	119.71	DEG.	F	ALM
C 30	FUEL OUTLET	149.54	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:43:01

STOPPED SINGLE SCAN 14 NOV 87 15:43:01

BEGIN SCAN GROUP 1 14 NOV 87 15:40:57
30KW 60HZ GEN SET 5-NR25 3774

C 1	EXHAUST 1	779.81	DEG.	F	ALM
C 2	EXHAUST 2	797.38	DEG.	F	ALM
C 3	EXHAUST 3	917.46	DEG.	F	ALM
C 4	EXHAUST 4	791.22	DEG.	F	ALM
C 5	EXHAUST 5	788.44	DEG.	F	ALM
C 6	EXHAUST 6	769.44	DEG.	F	ALM
C 7	ENG. COOL. IN	201.57	DEG.	F	ALM
C 8	ENG. COOL. OUT	209.59	DEG.	F	ALM
C 9	OIL SUMP	220.37	DEG.	F	ALM
C 10	OIL GALLERY	233.65	DEG.	F	ALM
C 11		.00000			
C 12		.00000			
C 13	ENG. INTAKE	130.98	DEG.	F	ALM
C 14	RAD. TOP LEFT	147.36	DEG.	F	ALM
C 15	RAD. BTM LEFT	142.72	DEG.	F	ALM
C 16	RAD. TOP RIGHT	144.75	DEG.	F	ALM
C 17	RAD. BTM RIGHT	147.31	DEG.	F	ALM
C 18	GEN. AIR IN	121.35	DEG.	F	ALM
C 19	GEN. AIR OUT	144.11	DEG.	F	ALM
C 20	GEN. FRAME TOP	129.87	DEG.	F	ALM
C 21	GEN. FRAME BTM	126.00	DEG.	F	ALM
C 22	GEN. EXCITER	130.68	DEG.	F	ALM
C 23	GEN. VOLT. REG.	133.39	DEG.	F	ALM
C 24	CONTROL PANEL	131.98	DEG.	F	ALM
C 25	RELAY AREA	127.18	DEG.	F	ALM
C 26	BATTERY LEFT	137.09	DEG.	F	ALM
C 27	BATTERY RIGHT	142.31	DEG.	F	ALM
C 28	AIR IN SET	123.29	DEG.	F	ALM
C 29	FUEL TANK	119.61	DEG.	F	ALM
C 30	FUEL OUTLET	150.32	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:41:07

STOPPED SINGLE SCAN 14 NOV 87 15:41:07

BEGIN SCAN GROUP 1 14 NOV 87 15:46:47
30KW 60HZ GEN SET 5-NR25 3774

C 1	EXHAUST 1	907.94	DEG.	F	ALM
C 2	EXHAUST 2	927.62	DEG.	F	ALM
C 3	EXHAUST 3	952.18	DEG.	F	ALM
C 4	EXHAUST 4	913.29	DEG.	F	ALM
C 5	EXHAUST 5	925.69	DEG.	F	ALM
C 6	EXHAUST 6	909.11	DEG.	F	ALM
C 7	ENG. COOL. IN	204.43	DEG.	F	ALM
C 8	ENG. COOL. OUT	212.83	DEG.	F	ALM
C 9	OIL SUMP	222.44	DEG.	F	ALM
C 10	OIL GALLERY	235.81	DEG.	F	ALM
C 11		.00000			
C 12		.00000			
C 13	ENG. INTAKE	131.41	DEG.	F	ALM
C 14	RAD. TOP LEFT	149.82	DEG.	F	ALM
C 15	RAD. BTM LEFT	143.68	DEG.	F	ALM
C 16	RAD. TOP RIGHT	145.98	DEG.	F	ALM
C 17	RAD. BTM RIGHT	148.22	DEG.	F	ALM
C 18	GEN. AIR IN	121.55	DEG.	F	ALM
C 19	GEN. AIR OUT	145.41	DEG.	F	ALM
C 20	GEN. FRAME TOP	130.22	DEG.	F	ALM
C 21	GEN. FRAME BTM	126.33	DEG.	F	ALM
C 22	GEN. EXCITER	131.00	DEG.	F	ALM
C 23	GEN. VOLT. REG.	133.49	DEG.	F	ALM
C 24	CONTROL PANEL	132.33	DEG.	F	ALM
C 25	RELAY AREA	127.76	DEG.	F	ALM
C 26	BATTERY LEFT	137.75	DEG.	F	ALM
C 27	BATTERY RIGHT	142.37	DEG.	F	ALM
C 28	AIR IN SET	123.56	DEG.	F	ALM
C 29	FUEL TANK	119.98	DEG.	F	ALM
C 30	FUEL OUTLET	151.38	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:46:57

STOPPED SINGLE SCAN 14 NOV 87 15:46:57

BEGIN SCAN GROUP 1 14 NOV 87 15:55:03
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	622.48	DEG.	F	ALM
2	EXHAUST 2	627.78	DEG.	F	ALM
3	EXHAUST 3	642.68	DEG.	F	ALM
4	EXHAUST 4	636.26	DEG.	F	ALM
5	EXHAUST 5	646.56	DEG.	F	ALM
6	EXHAUST 6	622.86	DEG.	F	ALM
7	ENG. COOL. IN	187.83	DEG.	F	ALM
8	ENG. COOL. OUT	193.48	DEG.	F	ALM
9	OIL SUMP	221.39	DEG.	F	ALM
10	OIL GALLERY	234.46	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.26	DEG.	F	ALM
14	RAD. TOP LEFT	143.88	DEG.	F	ALM
15	RAD. BTM LEFT	148.63	DEG.	F	ALM
16	RAD. TOP RIGHT	142.86	DEG.	F	ALM
17	RAD. BTM RIGHT	144.78	DEG.	F	ALM
18	GEN. AIR IN	121.83	DEG.	F	ALM
19	GEN. AIR OUT	141.93	DEG.	F	ALM
20	GEN. FRAME TOP	138.46	DEG.	F	ALM
21	GEN. FRAME BTM	126.45	DEG.	F	ALM
22	GEN. EXCITER	138.27	DEG.	F	ALM
23	GEN. VOLT. REG.	133.78	DEG.	F	ALM
24	CONTROL PANEL	132.77	DEG.	F	ALM
25	RELAY AREA	126.89	DEG.	F	ALM
26	BATTERY LEFT	138.88	DEG.	F	ALM
27	BATTERY RIGHT	142.82	DEG.	F	ALM
28	AIR IN SET	124.12	DEG.	F	ALM
29	FUEL TANK	128.35	DEG.	F	ALM
30	FUEL OUTLET	152.98	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 15:55:13

STOPPED SINGLE SCAN 14 NOV 87 15:55:13

BEGIN SCAN GROUP 1 14 NOV 87 16:08:13
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	777.35	DEG.	F	ALM
2	EXHAUST 2	795.24	DEG.	F	ALM
3	EXHAUST 3	816.88	DEG.	F	ALM
4	EXHAUST 4	788.25	DEG.	F	ALM
5	EXHAUST 5	786.88	DEG.	F	ALM
6	EXHAUST 6	768.53	DEG.	F	ALM
7	ENG. COOL. IN	282.85	DEG.	F	ALM
8	ENG. COOL. OUT	218.28	DEG.	F	ALM
9	OIL SUMP	222.38	DEG.	F	ALM
10	OIL GALLERY	235.12	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.84	DEG.	F	ALM
14	RAD. TOP LEFT	147.69	DEG.	F	ALM
15	RAD. BTM LEFT	142.78	DEG.	F	ALM
16	RAD. TOP RIGHT	144.94	DEG.	F	ALM
17	RAD. BTM RIGHT	147.45	DEG.	F	ALM
18	GEN. AIR IN	122.18	DEG.	F	ALM
19	GEN. AIR OUT	144.12	DEG.	F	ALM
20	GEN. FRAME TOP	123.89	DEG.	F	ALM
21	GEN. FRAME BTM	126.12	DEG.	F	ALM
22	GEN. EXCITER	138.67	DEG.	F	ALM
23	GEN. VOLT. REG.	133.46	DEG.	F	ALM
24	CONTROL PANEL	132.42	DEG.	F	ALM
25	RELAY AREA	127.43	DEG.	F	ALM
26	BATTERY LEFT	139.73	DEG.	F	ALM
27	BATTERY RIGHT	143.31	DEG.	F	ALM
28	AIR IN SET	123.95	DEG.	F	ALM
29	FUEL TANK	121.88	DEG.	F	ALM
30	FUEL OUTLET	158.81	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:08:23

STOPPED SINGLE SCAN 14 NOV 87 16:08:23

BEGIN SCAN GROUP 1 14 NOV 87 16:10:00
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	806.48	DEG.	F	ALM
2	EXHAUST 2	819.47	DEG.	F	ALM
3	EXHAUST 3	842.44	DEG.	F	ALM
4	EXHAUST 4	818.98	DEG.	F	ALM
5	EXHAUST 5	818.23	DEG.	F	ALM
6	EXHAUST 6	799.89	DEG.	F	ALM
7	ENG. COOL. IN	282.96	DEG.	F	ALM
8	ENG. COOL. OUT	211.29	DEG.	F	ALM
9	OIL SUMP	222.91	DEG.	F	ALM
10	OIL GALLERY	235.36	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	138.98	DEG.	F	ALM
14	RAD. TOP LEFT	148.87	DEG.	F	ALM
15	RAD. BTM LEFT	143.16	DEG.	F	ALM
16	RAD. TOP RIGHT	145.18	DEG.	F	ALM
17	RAD. BTM RIGHT	147.73	DEG.	F	ALM
18	GEN. AIR IN	122.48	DEG.	F	ALM
19	GEN. AIR OUT	144.82	DEG.	F	ALM
20	GEN. FRAME TOP	138.88	DEG.	F	ALM
21	GEN. FRAME BTM	126.15	DEG.	F	ALM
22	GEN. EXCITER	138.35	DEG.	F	ALM
23	GEN. VOLT. REG.	133.42	DEG.	F	ALM
24	CONTROL PANEL	132.37	DEG.	F	ALM
25	RELAY AREA	127.47	DEG.	F	ALM
26	BATTERY LEFT	139.98	DEG.	F	ALM
27	BATTERY RIGHT	145.14	DEG.	F	ALM
28	AIR IN SET	123.98	DEG.	F	ALM
29	FUEL TANK	121.11	DEG.	F	ALM
30	FUEL OUTLET	151.53	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:10:16

STOPPED SINGLE SCAN 14 NOV 87 16:10:16

BEGIN SCAN GROUP 1 14 NOV 87 16:14:05
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	889.81	DEG.	F	ALM
2	EXHAUST 2	828.72	DEG.	F	ALM
3	EXHAUST 3	858.22	DEG.	F	ALM
4	EXHAUST 4	818.46	DEG.	F	ALM
5	EXHAUST 5	826.74	DEG.	F	ALM
6	EXHAUST 6	808.78	DEG.	F	ALM
7	ENG. COOL. IN	285.12	DEG.	F	ALM
8	ENG. COOL. OUT	213.57	DEG.	F	ALM
9	OIL SUMP	223.66	DEG.	F	ALM
10	OIL GALLERY	236.86	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.51	DEG.	F	ALM
14	RAD. TOP LEFT	148.99	DEG.	F	ALM
15	RAD. BTM LEFT	143.92	DEG.	F	ALM
16	RAD. TOP RIGHT	146.85	DEG.	F	ALM
17	RAD. BTM RIGHT	148.48	DEG.	F	ALM
18	GEN. AIR IN	121.87	DEG.	F	ALM
19	GEN. AIR OUT	145.64	DEG.	F	ALM
20	GEN. FRAME TOP	138.36	DEG.	F	ALM
21	GEN. FRAME BTM	126.52	DEG.	F	ALM
22	GEN. EXCITER	131.21	DEG.	F	ALM
23	GEN. VOLT. REG.	133.66	DEG.	F	ALM
24	CONTROL PANEL	132.79	DEG.	F	ALM
25	RELAY AREA	127.69	DEG.	F	ALM
26	BATTERY LEFT	148.48	DEG.	F	ALM
27	BATTERY RIGHT	145.21	DEG.	F	ALM
28	AIR IN SET	123.54	DEG.	F	ALM
29	FUEL TANK	121.33	DEG.	F	ALM
30	FUEL OUTLET	158.72	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:14:15

STOPPED SINGLE SCAN 14 NOV 87 16:14:15

BEGIN SCAN GROUP 1 14 NOV 87 16:27:27
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	788.40	DEG.	F	ALN
2	EXHAUST 2	798.43	DEG.	F	ALN
3	EXHAUST 3	818.52	DEG.	F	ALN
4	EXHAUST 4	778.01	DEG.	F	ALN
5	EXHAUST 5	787.47	DEG.	F	ALN
6	EXHAUST 6	767.31	DEG.	F	ALN
7	ENG. COOL. IN	283.88	DEG.	F	ALN
8	ENG. COOL. OUT	211.88	DEG.	F	ALN
9	OIL SUMP	223.88	DEG.	F	ALN
10	OIL GALLERY	235.96	DEG.	F	ALN
11		.88888			
12		.88888			
13	ENG. INTAKE	134.21	DEG.	F	ALN
14	RAD. TOP LEFT	143.78	DEG.	F	ALN
15	RAD. BTM LEFT	143.31	DEG.	F	ALN
16	RAD. TOP RIGHT	147.88	DEG.	F	ALN
17	RAD. BTM RIGHT	149.67	DEG.	F	ALN
18	GEN. AIR IN	124.49	DEG.	F	ALN
19	GEN. AIR OUT	146.58	DEG.	F	ALN
20	GEN. FRAME TOP	132.83	DEG.	F	ALN
21	GEN. FRAME BTM	128.63	DEG.	F	ALN
22	GEN. EXCITER	133.88	DEG.	F	ALN
23	GEN. VOLT. REG.	134.57	DEG.	F	ALN
24	CONTROL PANEL	134.86	DEG.	F	ALN
25	RELAY AREA	138.19	DEG.	F	ALN
26	BATTERY LEFT	141.63	DEG.	F	ALN
27	BATTERY RIGHT	143.73	DEG.	F	ALN
28	AIR IN SET	126.56	DEG.	F	ALN
29	FUEL TANK	122.86	DEG.	F	ALN
30	FUEL OUTLET	152.78	DEG.	F	ALN

END SCAN GROUP 1 14 NOV 87 16:27:37

STOPPED SINGLE SCAN 14 NOV 87 16:27:37

BEGIN SCAN GROUP 1 14 NOV 87 16:38:29
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	824.91	DEG.	F	ALN
2	EXHAUST 2	858.39	DEG.	F	ALN
3	EXHAUST 3	872.77	DEG.	F	ALN
4	EXHAUST 4	833.52	DEG.	F	ALN
5	EXHAUST 5	848.28	DEG.	F	ALN
6	EXHAUST 6	824.87	DEG.	F	ALN
7	ENG. COOL. IN	284.79	DEG.	F	ALN
8	ENG. COOL. OUT	213.16	DEG.	F	ALN
9	OIL SUMP	224.41	DEG.	F	ALN
10	OIL GALLERY	237.65	DEG.	F	ALN
11		.88888			
12		.88888			
13	ENG. INTAKE	138.94	DEG.	F	ALN
14	RAD. TOP LEFT	148.22	DEG.	F	ALN
15	RAD. BTM LEFT	143.22	DEG.	F	ALN
16	RAD. TOP RIGHT	145.68	DEG.	F	ALN
17	RAD. BTM RIGHT	148.18	DEG.	F	ALN
18	GEN. AIR IN	128.13	DEG.	F	ALN
19	GEN. AIR OUT	144.71	DEG.	F	ALN
20	GEN. FRAME TOP	138.78	DEG.	F	ALN
21	GEN. FRAME BTM	126.91	DEG.	F	ALN
22	GEN. EXCITER	138.61	DEG.	F	ALN
23	GEN. VOLT. REG.	134.28	DEG.	F	ALN
24	CONTROL PANEL	133.44	DEG.	F	ALN
25	RELAY AREA	127.39	DEG.	F	ALN
26	BATTERY LEFT	142.78	DEG.	F	ALN
27	BATTERY RIGHT	146.58	DEG.	F	ALN
28	AIR IN SET	121.98	DEG.	F	ALN
29	FUEL TANK	122.66	DEG.	F	ALN
30	FUEL OUTLET	152.55	DEG.	F	ALN

END SCAN GROUP 1 14 NOV 87 16:38:39

STOPPED SINGLE SCAN 14 NOV 87 16:38:39

BEGIN SCAN GROUP 1 14 NOV 87 16:42:45
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	854.97	DEG.	F	ALN
2	EXHAUST 2	888.53	DEG.	F	ALN
3	EXHAUST 3	891.22	DEG.	F	ALN
4	EXHAUST 4	845.74	DEG.	F	ALN
5	EXHAUST 5	861.79	DEG.	F	ALN
6	EXHAUST 6	835.84	DEG.	F	ALN
7	ENG. COOL. IN	287.95	DEG.	F	ALN
8	ENG. COOL. OUT	216.36	DEG.	F	ALN
9	OIL SUMP	226.12	DEG.	F	ALN
10	OIL GALLERY	238.97	DEG.	F	ALN
11		.88888			
12		.88888			
13	ENG. INTAKE	131.88	DEG.	F	ALN
14	RAD. TOP LEFT	158.18	DEG.	F	ALN
15	RAD. BTM LEFT	144.88	DEG.	F	ALN
16	RAD. TOP RIGHT	147.81	DEG.	F	ALN
17	RAD. BTM RIGHT	149.78	DEG.	F	ALN
18	GEN. AIR IN	122.83	DEG.	F	ALN
19	GEN. AIR OUT	147.19	DEG.	F	ALN
20	GEN. FRAME TOP	138.93	DEG.	F	ALN
21	GEN. FRAME BTM	126.86	DEG.	F	ALN
22	GEN. EXCITER	131.47	DEG.	F	ALN
23	GEN. VOLT. REG.	134.25	DEG.	F	ALN
24	CONTROL PANEL	133.33	DEG.	F	ALN
25	RELAY AREA	128.58	DEG.	F	ALN
26	BATTERY LEFT	142.97	DEG.	F	ALN
27	BATTERY RIGHT	146.92	DEG.	F	ALN
28	AIR IN SET	125.23	DEG.	F	ALN
29	FUEL TANK	122.86	DEG.	F	ALN
30	FUEL OUTLET	151.83	DEG.	F	ALN

END SCAN GROUP 1 14 NOV 87 16:42:56

STOPPED SINGLE SCAN 14 NOV 87 16:42:56

BEGIN SCAN GROUP 1 14 NOV 87 16:45:52
30KW 60HZ GEN SET 5-NR25 3774

1	EXHAUST 1	444.65	DEG.	F	ALN
2	EXHAUST 2	468.51	DEG.	F	ALN
3	EXHAUST 3	478.48	DEG.	F	ALN
4	EXHAUST 4	481.88	DEG.	F	ALN
5	EXHAUST 5	492.53	DEG.	F	ALN
6	EXHAUST 6	462.15	DEG.	F	ALN
7	ENG. COOL. IN	212.11	DEG.	F	ALN
8	ENG. COOL. OUT	218.89	DEG.	F	ALN
9	OIL SUMP	238.62	DEG.	F	ALN
10	OIL GALLERY	234.29	DEG.	F	ALN
11		.88888			
12		.88888			
13	ENG. INTAKE	143.94	DEG.	F	ALN
14	RAD. TOP LEFT	163.76	DEG.	F	ALN
15	RAD. BTM LEFT	153.12	DEG.	F	ALN
16	RAD. TOP RIGHT	153.69	DEG.	F	ALN
17	RAD. BTM RIGHT	157.95	DEG.	F	ALN
18	GEN. AIR IN	123.24	DEG.	F	ALN
19	GEN. AIR OUT	148.77	DEG.	F	ALN
20	GEN. FRAME TOP	136.18	DEG.	F	ALN
21	GEN. FRAME BTM	127.48	DEG.	F	ALN
22	GEN. EXCITER	138.86	DEG.	F	ALN
23	GEN. VOLT. REG.	134.54	DEG.	F	ALN
24	CONTROL PANEL	134.47	DEG.	F	ALN
25	RELAY AREA	136.81	DEG.	F	ALN
26	BATTERY LEFT	143.49	DEG.	F	ALN
27	BATTERY RIGHT	147.35	DEG.	F	ALN
28	AIR IN SET	123.81	DEG.	F	ALN
29	FUEL TANK	123.81	DEG.	F	ALN
30	FUEL OUTLET	151.42	DEG.	F	ALN

END SCAN GROUP 1 14 NOV 87 16:46:01

STOPPED SINGLE SCAN 14 NOV 87 16:46:01

BEGIN SCAN GROUP 1 14 NOV 87 16:51:58
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	719.32	DEG.	F	ALM
C	2	EXHAUST 2	738.44	DEG.	F	ALM
C	3	EXHAUST 3	749.09	DEG.	F	ALM
C	4	EXHAUST 4	714.32	DEG.	F	ALM
C	5	EXHAUST 5	716.22	DEG.	F	ALM
C	6	EXHAUST 6	698.82	DEG.	F	ALM
C	7	ENG. COOL. IN	186.87	DEG.	F	ALM
C	8	ENG. COOL. OUT	193.62	DEG.	F	ALM
C	9	OIL SUMP	215.58	DEG.	F	ALM
C	10	OIL GALLERY	229.38	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	141.86	DEG.	F	ALM
C	15	RAD. BTM LEFT	139.63	DEG.	F	ALM
C	16	RAD. TOP RIGHT	141.65	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.28	DEG.	F	ALM
C	18	GEN. AIR IN	121.24	DEG.	F	ALM
C	19	GEN. AIR OUT	141.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.48	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.16	DEG.	F	ALM
C	22	GEN. EXCITER	129.38	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.57	DEG.	F	ALM
C	24	CONTROL PANEL	133.84	DEG.	F	ALM
C	25	RELAY AREA	126.58	DEG.	F	ALM
C	26	BATTERY LEFT	143.31	DEG.	F	ALM
C	27	BATTERY RIGHT	147.98	DEG.	F	ALM
C	28	AIR IN SET	123.43	DEG.	F	ALM
C	29	FUEL TANK	123.23	DEG.	F	ALM
C	30	FUEL OUTLET	152.88	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:52:09

STOPPED SINGLE SCAN 14 NOV 87 16:52:11

BEGIN SCAN GROUP 1 14 NOV 87 16:52:55
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	738.71	DEG.	F	ALM
C	2	EXHAUST 2	758.13	DEG.	F	ALM
C	3	EXHAUST 3	775.55	DEG.	F	ALM
C	4	EXHAUST 4	735.98	DEG.	F	ALM
C	5	EXHAUST 5	735.97	DEG.	F	ALM
C	6	EXHAUST 6	719.58	DEG.	F	ALM
C	7	ENG. COOL. IN	198.48	DEG.	F	ALM
C	8	ENG. COOL. OUT	197.52	DEG.	F	ALM
C	9	OIL SUMP	215.66	DEG.	F	ALM
C	10	OIL GALLERY	229.23	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.31	DEG.	F	ALM
C	14	RAD. TOP LEFT	142.96	DEG.	F	ALM
C	15	RAD. BTM LEFT	139.98	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.85	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.82	DEG.	F	ALM
C	18	GEN. AIR IN	121.68	DEG.	F	ALM
C	19	GEN. AIR OUT	141.73	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.17	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.22	DEG.	F	ALM
C	22	GEN. EXCITER	129.73	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.43	DEG.	F	ALM
C	24	CONTROL PANEL	132.91	DEG.	F	ALM
C	25	RELAY AREA	126.64	DEG.	F	ALM
C	26	BATTERY LEFT	143.28	DEG.	F	ALM
C	27	BATTERY RIGHT	147.62	DEG.	F	ALM
C	28	AIR IN SET	123.43	DEG.	F	ALM
C	29	FUEL TANK	123.22	DEG.	F	ALM
C	30	FUEL OUTLET	151.81	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 16:53:05

STOPPED SINGLE SCAN 14 NOV 87 16:53:05

BEGIN SCAN GROUP 1 14 NOV 87 16:56:00
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	738.21	DEG.	F	AL
C	2	EXHAUST 2	758.57	DEG.	F	AL
C	3	EXHAUST 3	825.87	DEG.	F	AL
C	4	EXHAUST 4	783.15	DEG.	F	AL
C	5	EXHAUST 5	790.66	DEG.	F	AL
C	6	EXHAUST 6	772.66	DEG.	F	AL
C	7	ENG. COOL. IN	197.74	DEG.	F	AL
C	8	ENG. COOL. OUT	205.58	DEG.	F	AL
C	9	OIL SUMP	217.81	DEG.	F	AL
C	10	OIL GALLERY	238.18	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.38	DEG.	F	AL
C	14	RAD. TOP LEFT	145.75	DEG.	F	AL
C	15	RAD. BTM LEFT	141.82	DEG.	F	AL
C	16	RAD. TOP RIGHT	143.74	DEG.	F	AL
C	17	RAD. BTM RIGHT	145.87	DEG.	F	AL
C	18	GEN. AIR IN	122.54	DEG.	F	AL
C	19	GEN. AIR OUT	143.69	DEG.	F	AL
C	20	GEN. FRAME TOP	138.31	DEG.	F	AL
C	21	GEN. FRAME BTM	126.47	DEG.	F	AL
C	22	GEN. EXCITER	138.78	DEG.	F	AL
C	23	GEN. VOLT. REG.	134.19	DEG.	F	AL
C	24	CONTROL PANEL	132.64	DEG.	F	AL
C	25	RELAY AREA	127.68	DEG.	F	AL
C	26	BATTERY LEFT	143.28	DEG.	F	AL
C	27	BATTERY RIGHT	147.36	DEG.	F	AL
C	28	AIR IN SET	124.51	DEG.	F	AL
C	29	FUEL TANK	123.36	DEG.	F	AL
C	30	FUEL OUTLET	151.27	DEG.	F	AL

END SCAN GROUP 1 14 NOV 87 16:56:00

STOPPED SINGLE SCAN 14 NOV 87 16:56:00

BEGIN SCAN GROUP 1 14 NOV 87 17:00:00
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	788.24	DEG.	F	AL
C	2	EXHAUST 2	887.33	DEG.	F	AL
C	3	EXHAUST 3	832.45	DEG.	F	AL
C	4	EXHAUST 4	794.44	DEG.	F	AL
C	5	EXHAUST 5	883.11	DEG.	F	AL
C	6	EXHAUST 6	787.72	DEG.	F	AL
C	7	ENG. COOL. IN	281.67	DEG.	F	AL
C	8	ENG. COOL. OUT	289.66	DEG.	F	AL
C	9	OIL SUMP	218.93	DEG.	F	AL
C	10	OIL GALLERY	232.25	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.28	DEG.	F	AL
C	14	RAD. TOP LEFT	146.77	DEG.	F	AL
C	15	RAD. BTM LEFT	142.25	DEG.	F	AL
C	16	RAD. TOP RIGHT	144.26	DEG.	F	AL
C	17	RAD. BTM RIGHT	146.68	DEG.	F	AL
C	18	GEN. AIR IN	121.84	DEG.	F	AL
C	19	GEN. AIR OUT	144.38	DEG.	F	AL
C	20	GEN. FRAME TOP	138.82	DEG.	F	AL
C	21	GEN. FRAME BTM	126.25	DEG.	F	AL
C	22	GEN. EXCITER	138.24	DEG.	F	AL
C	23	GEN. VOLT. REG.	134.85	DEG.	F	AL
C	24	CONTROL PANEL	132.77	DEG.	F	AL
C	25	RELAY AREA	127.28	DEG.	F	AL
C	26	BATTERY LEFT	143.56	DEG.	F	AL
C	27	BATTERY RIGHT	148.41	DEG.	F	AL
C	28	AIR IN SET	123.39	DEG.	F	AL
C	29	FUEL TANK	123.51	DEG.	F	AL
C	30	FUEL OUTLET	152.13	DEG.	F	AL

END SCAN GROUP 1 14 NOV 87 17:00:01

STOPPED SINGLE SCAN 14 NOV 87 17:00:01

BEGIN SCAN GROUP 1 14 NOV 87 17:05:37
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	769.48	DEG.	F	ALM
2	EXHAUST 2	723.95	DEG.	F	ALM
3	EXHAUST 3	740.65	DEG.	F	ALM
4	EXHAUST 4	727.87	DEG.	F	ALM
5	EXHAUST 5	730.47	DEG.	F	ALM
6	EXHAUST 6	713.35	DEG.	F	ALM
7	ENG. COOL. IN	199.82	DEG.	F	ALM
8	ENG. COOL. OUT	205.62	DEG.	F	ALM
9	OIL SUMP	228.37	DEG.	F	ALM
10	OIL GALLERY	233.96	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	129.92	DEG.	F	ALM
14	RAD. TOP LEFT	146.36	DEG.	F	ALM
15	RAD. BTM LEFT	142.36	DEG.	F	ALM
16	RAD. TOP RIGHT	144.37	DEG.	F	ALM
17	RAD. BTM RIGHT	146.69	DEG.	F	ALM
18	GEN. AIR IN	121.38	DEG.	F	ALM
19	GEN. AIR OUT	143.94	DEG.	F	ALM
20	GEN. FRAME TOP	129.95	DEG.	F	ALM
21	GEN. FRAME BTM	126.83	DEG.	F	ALM
22	GEN. EXCITER	138.36	DEG.	F	ALM
23	GEN. VOLT. REG.	133.83	DEG.	F	ALM
24	CONTROL PANEL	132.55	DEG.	F	ALM
25	RELAY AREA	127.18	DEG.	F	ALM
26	BATTERY LEFT	143.99	DEG.	F	ALM
27	BATTERY RIGHT	147.98	DEG.	F	ALM
28	AIR IN SET	123.93	DEG.	F	ALM
29	FUEL TANK	123.75	DEG.	F	ALM
30	FUEL OUTLET	151.98	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:05:46

STOPPED SINGLE SCAN 14 NOV 87 17:05:46

BEGIN SCAN GROUP 1 14 NOV 87 17:09:14
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	765.35	DEG.	F	ALM
2	EXHAUST 2	792.77	DEG.	F	ALM
3	EXHAUST 3	988.92	DEG.	F	ALM
4	EXHAUST 4	778.99	DEG.	F	ALM
5	EXHAUST 5	776.66	DEG.	F	ALM
6	EXHAUST 6	756.29	DEG.	F	ALM
7	ENG. COOL. IN	199.98	DEG.	F	ALM
8	ENG. COOL. OUT	207.96	DEG.	F	ALM
9	OIL SUMP	228.96	DEG.	F	ALM
10	OIL GALLERY	234.16	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.82	DEG.	F	ALM
14	RAD. TOP LEFT	147.98	DEG.	F	ALM
15	RAD. BTM LEFT	143.56	DEG.	F	ALM
16	RAD. TOP RIGHT	145.43	DEG.	F	ALM
17	RAD. BTM RIGHT	147.84	DEG.	F	ALM
18	GEN. AIR IN	124.39	DEG.	F	ALM
19	GEN. AIR OUT	145.43	DEG.	F	ALM
20	GEN. FRAME TOP	138.94	DEG.	F	ALM
21	GEN. FRAME BTM	126.81	DEG.	F	ALM
22	GEN. EXCITER	132.16	DEG.	F	ALM
23	GEN. VOLT. REG.	133.95	DEG.	F	ALM
24	CONTROL PANEL	132.76	DEG.	F	ALM
25	RELAY AREA	129.66	DEG.	F	ALM
26	BATTERY LEFT	144.20	DEG.	F	ALM
27	BATTERY RIGHT	148.75	DEG.	F	ALM
28	AIR IN SET	126.44	DEG.	F	ALM
29	FUEL TANK	123.95	DEG.	F	ALM
30	FUEL OUTLET	151.55	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:09:24

STOPPED SINGLE SCAN 14 NOV 87 17:09:24

BEGIN SCAN GROUP 1 14 NOV 87 17:24:12
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	776.31	DEG.	F	AL
2	EXHAUST 2	794.48	DEG.	F	AL
3	EXHAUST 3	811.87	DEG.	F	AL
4	EXHAUST 4	777.89	DEG.	F	AL
5	EXHAUST 5	786.16	DEG.	F	AL
6	EXHAUST 6	763.45	DEG.	F	AL
7	ENG. COOL. IN	202.67	DEG.	F	AL
8	ENG. COOL. OUT	218.88	DEG.	F	AL
9	OIL SUMP	223.16	DEG.	F	AL
10	OIL GALLERY	236.61	DEG.	F	AL
11		.00000			
12		.00000			
13	ENG. INTAKE	138.73	DEG.	F	AL
14	RAD. TOP LEFT	147.46	DEG.	F	AL
15	RAD. BTM LEFT	142.65	DEG.	F	AL
16	RAD. TOP RIGHT	145.83	DEG.	F	AL
17	RAD. BTM RIGHT	147.53	DEG.	F	AL
18	GEN. AIR IN	121.34	DEG.	F	AL
19	GEN. AIR OUT	143.81	DEG.	F	AL
20	GEN. FRAME TOP	138.88	DEG.	F	AL
21	GEN. FRAME BTM	125.84	DEG.	F	AL
22	GEN. EXCITER	138.98	DEG.	F	AL
23	GEN. VOLT. REG.	133.86	DEG.	F	AL
24	CONTROL PANEL	132.89	DEG.	F	AL
25	RELAY AREA	127.13	DEG.	F	AL
26	BATTERY LEFT	145.29	DEG.	F	AL
27	BATTERY RIGHT	149.49	DEG.	F	AL
28	AIR IN SET	123.57	DEG.	F	AL
29	FUEL TANK	124.69	DEG.	F	AL
30	FUEL OUTLET	158.75	DEG.	F	AL

END SCAN GROUP 1 14 NOV 87 17:24:22

STOPPED SINGLE SCAN 14 NOV 87 17:24:22

BEGIN SCAN GROUP 1 14 NOV 87 17:26:12
30KM 60HZ GEN SET S-NR25 3774

1	EXHAUST 1	781.48	DEG.	F	AL
2	EXHAUST 2	988.38	DEG.	F	AL
3	EXHAUST 3	818.43	DEG.	F	AL
4	EXHAUST 4	795.17	DEG.	F	AL
5	EXHAUST 5	794.85	DEG.	F	AL
6	EXHAUST 6	771.31	DEG.	F	AL
7	ENG. COOL. IN	202.77	DEG.	F	AL
8	ENG. COOL. OUT	211.88	DEG.	F	AL
9	OIL SUMP	223.22	DEG.	F	AL
10	OIL GALLERY	236.68	DEG.	F	AL
11		.00000			
12		.00000			
13	ENG. INTAKE	138.61	DEG.	F	AL
14	RAD. TOP LEFT	147.51	DEG.	F	AL
15	RAD. BTM LEFT	142.49	DEG.	F	AL
16	RAD. TOP RIGHT	144.91	DEG.	F	AL
17	RAD. BTM RIGHT	147.47	DEG.	F	AL
18	GEN. AIR IN	128.95	DEG.	F	AL
19	GEN. AIR OUT	143.88	DEG.	F	AL
20	GEN. FRAME TOP	129.87	DEG.	F	AL
21	GEN. FRAME BTM	125.73	DEG.	F	AL
22	GEN. EXCITER	138.33	DEG.	F	AL
23	GEN. VOLT. REG.	133.88	DEG.	F	AL
24	CONTROL PANEL	132.76	DEG.	F	AL
25	RELAY AREA	126.89	DEG.	F	AL
26	BATTERY LEFT	145.42	DEG.	F	AL
27	BATTERY RIGHT	149.64	DEG.	F	AL
28	AIR IN SET	122.89	DEG.	F	AL
29	FUEL TANK	124.85	DEG.	F	AL
30	FUEL OUTLET	151.60	DEG.	F	AL

END SCAN GROUP 1 14 NOV 87 17:26:22

STOPPED SINGLE SCAN 14 NOV 87 17:26:22

BEGIN SCAN GROUP 1 14 NOV 87 17:55:54
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	791.92	DEG.	F	ALM
2	EXHAUST 2	803.51	DEG.	F	ALM
3	EXHAUST 3	823.15	DEG.	F	ALM
4	EXHAUST 4	787.17	DEG.	F	ALM
5	EXHAUST 5	796.59	DEG.	F	ALM
6	EXHAUST 6	776.31	DEG.	F	ALM
7	ENG. COOL. IN	285.11	DEG.	F	ALM
8	ENG. COOL. OUT	213.44	DEG.	F	ALM
9	OIL SUMP	225.52	DEG.	F	ALM
10	OIL GALLERY	238.82	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	132.17	DEG.	F	ALM
14	RAD. TOP LEFT	149.52	DEG.	F	ALM
15	RAD. BTM LEFT	144.68	DEG.	F	ALM
16	RAD. TOP RIGHT	146.89	DEG.	F	ALM
17	RAD. BTM RIGHT	149.48	DEG.	F	ALM
18	GEN. AIR IN	122.98	DEG.	F	ALM
19	GEN. AIR OUT	147.92	DEG.	F	ALM
20	GEN. FRAME TOP	131.87	DEG.	F	ALM
21	GEN. FRAME BTM	127.28	DEG.	F	ALM
22	GEN. EXCITER	132.89	DEG.	F	ALM
23	GEN. VOLT. REG.	134.47	DEG.	F	ALM
24	CONTROL PANEL	133.74	DEG.	F	ALM
25	RELAY AREA	128.69	DEG.	F	ALM
26	BATTERY LEFT	147.42	DEG.	F	ALM
27	BATTERY RIGHT	151.26	DEG.	F	ALM
28	AIR IN SET	125.28	DEG.	F	ALM
29	FUEL TANK	126.28	DEG.	F	ALM
30	FUEL OUTLET	153.11	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 17:56:04

STOPPED SINGLE SCAN 14 NOV 87 17:56:04

BEGIN SCAN GROUP 1 14 NOV 87 18:25:16
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	797.91	DEG.	F	ALM
2	EXHAUST 2	803.93	DEG.	F	ALM
3	EXHAUST 3	822.97	DEG.	F	ALM
4	EXHAUST 4	781.88	DEG.	F	ALM
5	EXHAUST 5	792.83	DEG.	F	ALM
6	EXHAUST 6	775.38	DEG.	F	ALM
7	ENG. COOL. IN	283.13	DEG.	F	ALM
8	ENG. COOL. OUT	211.45	DEG.	F	ALM
9	OIL SUMP	224.68	DEG.	F	ALM
10	OIL GALLERY	238.83	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	129.38	DEG.	F	ALM
14	RAD. TOP LEFT	146.83	DEG.	F	ALM
15	RAD. BTM LEFT	142.38	DEG.	F	ALM
16	RAD. TOP RIGHT	144.77	DEG.	F	ALM
17	RAD. BTM RIGHT	147.18	DEG.	F	ALM
18	GEN. AIR IN	119.25	DEG.	F	ALM
19	GEN. AIR OUT	145.75	DEG.	F	ALM
20	GEN. FRAME TOP	129.79	DEG.	F	ALM
21	GEN. FRAME BTM	125.25	DEG.	F	ALM
22	GEN. EXCITER	129.28	DEG.	F	ALM
23	GEN. VOLT. REG.	133.48	DEG.	F	ALM
24	CONTROL PANEL	132.14	DEG.	F	ALM
25	RELAY AREA	125.84	DEG.	F	ALM
26	BATTERY LEFT	148.85	DEG.	F	ALM
27	BATTERY RIGHT	153.82	DEG.	F	ALM
28	AIR IN SET	121.34	DEG.	F	ALM
29	FUEL TANK	127.38	DEG.	F	ALM
30	FUEL OUTLET	151.49	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 18:25:25

STOPPED SINGLE SCAN 14 NOV 87 18:25:25

BEGIN SCAN GROUP 1 14 NOV 87 18:55:36
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	786.31	DEG.	F	ALM
2	EXHAUST 2	804.73	DEG.	F	ALM
3	EXHAUST 3	821.48	DEG.	F	ALM
4	EXHAUST 4	781.92	DEG.	F	ALM
5	EXHAUST 5	794.25	DEG.	F	ALM
6	EXHAUST 6	774.99	DEG.	F	ALM
7	ENG. COOL. IN	284.92	DEG.	F	ALM
8	ENG. COOL. OUT	213.24	DEG.	F	ALM
9	OIL SUMP	225.69	DEG.	F	ALM
10	OIL GALLERY	239.14	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.59	DEG.	F	ALM
14	RAD. TOP LEFT	148.88	DEG.	F	ALM
15	RAD. BTM LEFT	144.29	DEG.	F	ALM
16	RAD. TOP RIGHT	146.88	DEG.	F	ALM
17	RAD. BTM RIGHT	149.14	DEG.	F	ALM
18	GEN. AIR IN	121.96	DEG.	F	ALM
19	GEN. AIR OUT	147.93	DEG.	F	ALM
20	GEN. FRAME TOP	131.56	DEG.	F	ALM
21	GEN. FRAME BTM	127.86	DEG.	F	ALM
22	GEN. EXCITER	131.44	DEG.	F	ALM
23	GEN. VOLT. REG.	134.28	DEG.	F	ALM
24	CONTROL PANEL	133.48	DEG.	F	ALM
25	RELAY AREA	127.93	DEG.	F	ALM
26	BATTERY LEFT	158.39	DEG.	F	ALM
27	BATTERY RIGHT	155.29	DEG.	F	ALM
28	AIR IN SET	124.27	DEG.	F	ALM
29	FUEL TANK	128.35	DEG.	F	ALM
30	FUEL OUTLET	153.23	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 18:55:45

STOPPED SINGLE SCAN 14 NOV 87 18:55:45

BEGIN SCAN GROUP 1 14 NOV 87 19:24:36
30KW 60HZ GEN SET S/NR25 3774

1	EXHAUST 1	782.49	DEG.	F	ALM
2	EXHAUST 2	805.45	DEG.	F	ALM
3	EXHAUST 3	828.56	DEG.	F	ALM
4	EXHAUST 4	781.87	DEG.	F	ALM
5	EXHAUST 5	794.92	DEG.	F	ALM
6	EXHAUST 6	772.26	DEG.	F	ALM
7	ENG. COOL. IN	284.64	DEG.	F	ALM
8	ENG. COOL. OUT	212.96	DEG.	F	ALM
9	OIL SUMP	225.59	DEG.	F	ALM
10	OIL GALLERY	238.78	DEG.	F	ALM
11		.00000			
12		.00000			
13	ENG. INTAKE	131.13	DEG.	F	ALM
14	RAD. TOP LEFT	148.52	DEG.	F	ALM
15	RAD. BTM LEFT	143.69	DEG.	F	ALM
16	RAD. TOP RIGHT	146.28	DEG.	F	ALM
17	RAD. BTM RIGHT	148.78	DEG.	F	ALM
18	GEN. AIR IN	128.85	DEG.	F	ALM
19	GEN. AIR OUT	147.26	DEG.	F	ALM
20	GEN. FRAME TOP	131.24	DEG.	F	ALM
21	GEN. FRAME BTM	126.86	DEG.	F	ALM
22	GEN. EXCITER	138.97	DEG.	F	ALM
23	GEN. VOLT. REG.	133.95	DEG.	F	ALM
24	CONTROL PANEL	132.91	DEG.	F	ALM
25	RELAY AREA	127.32	DEG.	F	ALM
26	BATTERY LEFT	151.68	DEG.	F	ALM
27	BATTERY RIGHT	156.92	DEG.	F	ALM
28	AIR IN SET	123.37	DEG.	F	ALM
29	FUEL TANK	129.15	DEG.	F	ALM
30	FUEL OUTLET	152.61	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 19:24:3

STOPPED SINGLE SCAN 14 NOV 87 19:24:4

REF. NO. MLL 57D 705
SHEET 1 OF 1
DATE 17 Nov 1987
JOB NO. 5535-2140
PROJ. ENGR. _____
RECORDER/OBSERVER GC/ST/KM

QUESTIONS PERTAINING TO THE TEST

METHOD 515.2

ITEM 30 Kw / 60 HZ
GENERATOR SET
MOQUERO
MFCR. CARRY WEIRING
MODEL NO. MAP 005A
SERIAL NO. R25 3774

[illegible]

OVERTEMP PROTECTIVE DEVICE TEST S/S. 2

BEGIN SCAN GROUP 1 17 NOV 87 14:16:39
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	674.87	DEG.	F	ALM
C	2	EXHAUST 2	689.58	DEG.	F	ALM
C	3	EXHAUST 3	688.83	DEG.	F	ALM
C	4	EXHAUST 4	658.24	DEG.	F	ALM
C	5	EXHAUST 5	654.98	DEG.	F	ALM
C	6	EXHAUST 6	628.82	DEG.	F	ALM
C	7	ENG. COOL. IN	116.38	DEG.	F	ALM
C	8	ENG. COOL. OUT	144.49	DEG.	F	ALM
C	9	OIL SUMP	144.17	DEG.	F	ALM
C	10	OIL GALLERY	148.88	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	116.73	DEG.	F	ALM
C	14	RAD. TOP LEFT	119.19	DEG.	F	ALM
C	15	RAD. BTM LEFT	119.53	DEG.	F	ALM
C	16	RAD. TOP RIGHT	118.75	DEG.	F	ALM
C	17	RAD. BTM RIGHT	118.58	DEG.	F	ALM
C	18	GEN. AIR IN	112.78	DEG.	F	ALM
C	19	GEN. AIR OUT	124.24	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.46	DEG.	F	ALM
C	21	GEN. FRAME BTM	116.23	DEG.	F	ALM
C	22	GEN. EXCITER	187.62	DEG.	F	ALM
C	23	GEN. VOLT. REG.	119.66	DEG.	F	ALM
C	24	CONTROL PANEL	115.88	DEG.	F	ALM
C	25	RELAY AREA	113.67	DEG.	F	ALM
C	26	BATTERY LEFT	95.918	DEG.	F	ALM
C	27	BATTERY RIGHT	99.144	DEG.	F	ALM
C	28	AIR IN SET	93.323	DEG.	F	ALM
C	29	FUEL TANK	184.35	DEG.	F	ALM
C	30	FUEL OUTLET	118.93	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 14:16:49

STOPPED SINGLE SCAN 17 NOV 87 14:16:50

BEGIN SCAN GROUP 1 17 NOV 87 14:27:46
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	698.87	DEG.	F	ALM
C	2	EXHAUST 2	728.87	DEG.	F	ALM
C	3	EXHAUST 3	726.96	DEG.	F	ALM
C	4	EXHAUST 4	787.39	DEG.	F	ALM
C	5	EXHAUST 5	786.52	DEG.	F	ALM
C	6	EXHAUST 6	692.27	DEG.	F	ALM
C	7	ENG. COOL. IN	221.98	DEG.	F	ALM
C	8	ENG. COOL. OUT	227.84	DEG.	F	ALM
C	9	OIL SUMP	285.47	DEG.	F	ALM
C	10	OIL GALLERY	286.59	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	117.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	175.17	DEG.	F	ALM
C	15	RAD. BTM LEFT	171.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	169.78	DEG.	F	ALM
C	17	RAD. BTM RIGHT	167.57	DEG.	F	ALM
C	18	GEN. AIR IN	116.24	DEG.	F	ALM
C	19	GEN. AIR OUT	128.98	DEG.	F	ALM
C	20	GEN. FRAME TOP	121.73	DEG.	F	ALM
C	21	GEN. FRAME BTM	128.38	DEG.	F	ALM
C	22	GEN. EXCITER	113.92	DEG.	F	ALM
C	23	GEN. VOLT. REG.	118.14	DEG.	F	ALM
C	24	CONTROL PANEL	113.66	DEG.	F	ALM
C	25	RELAY AREA	137.87	DEG.	F	ALM
C	26	BATTERY LEFT	112.39	DEG.	F	ALM
C	27	BATTERY RIGHT	118.73	DEG.	F	ALM
C	28	AIR IN SET	99.929	DEG.	F	ALM
C	29	FUEL TANK	186.46	DEG.	F	ALM
C	30	FUEL OUTLET	132.31	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 14:27:56

STOPPED SINGLE SCAN 17 NOV 87 14:27:56

TEST DATA

ITEM 30 Kw / 60 Hz

GENERATOR SET

MANUFACT

HFGR. LABBY WELLS

MODEL NO. MGP 005A

SERIAL NO. 1225 3774

NAS

National
Technical
Systems

Scientific
Services
Group

Testing Division
PO. Box 36
Hartwood, Virginia 22471
Tel. 703 752 5300

Max Power Test

Method 601c

REF. NO. MIL-STD 705

SHEET 1 OF 1

DATE 17 Jan 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER GC/AS/KM

INST TIME	LOAD STEP NO.	VOLTAGE			AMPERES X 40			KILOWATTS X 40			POWER FACTOR PF	FREQ. Hz	EXCITER		FIELD AMPS DCA	AMB. TEMP. °F	PRESS INCHES IN UNIT
		L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC MP	L2-L0 AC MP	L3-L0 AC MP	L1-L0 KW	L2-L0 KW	L3-L0 KW			VOLTS VDC				
1655	RL	120	121.5	120.9	2.46	2.51	2.5	.242	.25	.244	.80	60.1	8.7	3.4	89.4	13.7 417	
1525	RL	120	121.1	120.5	2.46	2.51	2.5	.241	.25	.244	.80	60.2	8.7	3.4	88.1	13.9 414	
1515	RL	120	121.1	120.5	2.46	2.51	2.5	.242	.25	.244	.80	60.2	8.6	3.4	87.2	13.4 412	
1525	RL	120	121.1	120.5	2.46	2.51	2.5	.241	.25	.244	.80	60.2	8.6	3.4	89.4	13.3 404	
1535	RL	120	121.1	120.5	2.46	2.51	2.44	.241	.25	.244	.80	60.2	8.6	3.4	89.5	13.8 417	
1545	MIP	N/A	N/A	N/A	N/A	N/A	N/A	.35	.36	.357	N/A	N/A	N/A	N/A	N/A	N/A	
1546	SHUT	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN							
1621	RESTART	UP	UP	UP	UP	UP	UP	UP	UP	UP							
1621	RL	120	121.1	120.6	2.51	2.55	2.56	.25	.257	.252	.80	60.1	8.1	3.3	82.0	13.5 384	
1625	RL	120	121.1	120.4	2.51	2.55	2.55	.25	.256	.255	.80	60.1	8.2	3.3	83.2	13.7 401	
1635	RL	120	121	120.5	2.51	2.55	2.55	.25	.255	.254	.80	60.2	8.3	3.3	85.0	13.7 413	
1645	RL	120	121	120.5	2.51	2.55	2.55	.25	.256	.255	.80	60.2	8.3	3.4	84.7	13.8 417	
1655	RL	120	121.1	120.4	2.51	2.55	2.55	.25	.256	.255	.80	60.2	8.3	3.4	85.7	13.8 410	
1657	PLACED	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN							
1710	MIP	N/A	N/A	N/A	N/A	N/A	N/A	.33	.34	.33	N/A	N/A	N/A	N/A	N/A	N/A	
1715	RL	120	121	120.2	2.51	2.55	2.55	.25	.256	.255	.80	60.0	8.4	3.4	83.4	13.0 370	
1721	MIP	120	123	120.1	2.7	2.25	2.71	.325	.243	.33	.99	60.0	6.1	2.5	83.5	13.6 405	
1734	RL	120	121	120.5	2.51	2.55	2.55	.244	.255	.254	.80	60.0	8.3	3.4	83.5	13.0 375	
1735	MIP	120	123	120.5	2.7	2.25	2.71	.325	.243	.33	.99	60.0	6.1	2.4	83.0	13.7 379	
1741	RL	120	121	120.5	2.51	2.55	2.55	.244	.255	.252	.80	60.0	8.3	3.4	85.0	13.9 410	
1749	MIP	120	123	120	2.7	2.25	2.7	.325	.243	.33	.99	59.9	6.2	2.4	82.0	13.8 401	
1752	SHUT	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN							
1819	AUGUST	1985															
1819	30AN	1985															

1908, on with low power on L2-L0 DURING MAX POWER

NOTES:

MAX POWER 640.1

BEGIN SCAN GROUP 1 17 NOV 87 15:03:34
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	705.76	DEG.	F	ALM
C	2	EXHAUST 2	734.28	DEG.	F	ALM
C	3	EXHAUST 3	756.61	DEG.	F	ALM
C	4	EXHAUST 4	723.55	DEG.	F	ALM
C	5	EXHAUST 5	734.78	DEG.	F	ALM
C	6	EXHAUST 6	708.92	DEG.	F	ALM
C	7	ENG. COOL. IN	172.77	DEG.	F	ALM
C	8	ENG. COOL. OUT	183.11	DEG.	F	ALM
C	9	OIL SUMP	209.19	DEG.	F	ALM
C	10	OIL GALLERY	209.91	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	94.302	DEG.	F	ALM
C	14	RAD. TOP LEFT	113.89	DEG.	F	ALM
C	15	RAD. BTM LEFT	108.43	DEG.	F	ALM
C	16	RAD. TOP RIGHT		OPEN	TC	
C	17	RAD. BTM RIGHT	112.65	DEG.	F	ALM
C	18	GEN. AIR IN	87.975	DEG.	F	ALM
C	19	GEN. AIR OUT	111.12	DEG.	F	ALM
C	20	GEN. FRAME TOP	98.212	DEG.	F	ALM
C	21	GEN. FRAME BTM	98.564	DEG.	F	ALM
C	22	GEN. EXCITER	94.105	DEG.	F	ALM
C	23	GEN. VOLT. REG.	111.59	DEG.	F	ALM
C	24	CONTROL PANEL	104.35	DEG.	F	ALM
C	25	RELAY AREA	93.169	DEG.	F	ALM
C	26	BATTERY LEFT	107.64	DEG.	F	ALM
C	27	BATTERY RIGHT	106.79	DEG.	F	ALM
C	28	AIR IN SET	87.495	DEG.	F	ALM
C	29	FUEL TANK	100.87	DEG.	F	ALM
C	30	FUEL OUTLET	125.02	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 15:03:44

STOPPED SINGLE SCAN 17 NOV 87 15:03:44

BEGIN SCAN GROUP 1 17 NOV 87 15:24:1
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	698.89	DEG.	F	AL
C	2	EXHAUST 2	727.64	DEG.	F	AL
C	3	EXHAUST 3	747.89	DEG.	F	AL
C	4	EXHAUST 4	719.88	DEG.	F	AL
C	5	EXHAUST 5	736.35	DEG.	F	AL
C	6	EXHAUST 6	708.35	DEG.	F	AL
C	7	ENG. COOL. IN	172.31	DEG.	F	AL
C	8	ENG. COOL. OUT	183.88	DEG.	F	AL
C	9	OIL SUMP	212.23	DEG.	F	AL
C	10	OIL GALLERY	213.88	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	94.238	DEG.	F	AL
C	14	RAD. TOP LEFT	111.15	DEG.	F	AL
C	15	RAD. BTM LEFT	108.40	DEG.	F	AL
C	16	RAD. TOP RIGHT		OPEN	TC	
C	17	RAD. BTM RIGHT	112.64	DEG.	F	AL
C	18	GEN. AIR IN	88.958	DEG.	F	AL
C	19	GEN. AIR OUT	110.81	DEG.	F	AL
C	20	GEN. FRAME TOP	95.572	DEG.	F	AL
C	21	GEN. FRAME BTM	95.445	DEG.	F	AL
C	22	GEN. EXCITER	94.356	DEG.	F	AL
C	23	GEN. VOLT. REG.	105.12	DEG.	F	AL
C	24	CONTROL PANEL	99.419	DEG.	F	AL
C	25	RELAY AREA	92.615	DEG.	F	AL
C	26	BATTERY LEFT	106.97	DEG.	F	AL
C	27	BATTERY RIGHT	106.05	DEG.	F	AL
C	28	AIR IN SET	89.873	DEG.	F	AL
C	29	FUEL TANK	100.37	DEG.	F	AL
C	30	FUEL OUTLET	118.77	DEG.	F	AL

END SCAN GROUP 1 17 NOV 87 15:24:2

STOPPED SINGLE SCAN 17 NOV 87 15:24:2

BEGIN SCAN GROUP 1 17 NOV 87 15:13:50
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	599.85	DEG.	F	ALM
C	2	EXHAUST 2	728.20	DEG.	F	ALM
C	3	EXHAUST 3	748.60	DEG.	F	ALM
C	4	EXHAUST 4	721.44	DEG.	F	ALM
C	5	EXHAUST 5	739.76	DEG.	F	ALM
C	6	EXHAUST 6	703.34	DEG.	F	ALM
C	7	ENG. COOL. IN	172.21	DEG.	F	ALM
C	8	ENG. COOL. OUT	182.82	DEG.	F	ALM
C	9	OIL SUMP	211.49	DEG.	F	ALM
C	10	OIL GALLERY	212.38	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	93.853	DEG.	F	ALM
C	14	RAD. TOP LEFT	110.87	DEG.	F	ALM
C	15	RAD. BTM LEFT	107.99	DEG.	F	ALM
C	16	RAD. TOP RIGHT	110.35	DEG.	F	ALM
C	17	RAD. BTM RIGHT	112.36	DEG.	F	ALM
C	18	GEN. AIR IN	88.562	DEG.	F	ALM
C	19	GEN. AIR OUT	110.23	DEG.	F	ALM
C	20	GEN. FRAME TOP	95.987	DEG.	F	ALM
C	21	GEN. FRAME BTM	95.886	DEG.	F	ALM
C	22	GEN. EXCITER	93.814	DEG.	F	ALM
C	23	GEN. VOLT. REG.	107.63	DEG.	F	ALM
C	24	CONTROL PANEL	100.89	DEG.	F	ALM
C	25	RELAY AREA	92.347	DEG.	F	ALM
C	26	BATTERY LEFT	106.93	DEG.	F	ALM
C	27	BATTERY RIGHT	106.13	DEG.	F	ALM
C	28	AIR IN SET	88.575	DEG.	F	ALM
C	29	FUEL TANK	100.31	DEG.	F	ALM
C	30	FUEL OUTLET	120.67	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 15:14:00

STOPPED SINGLE SCAN 17 NOV 87 15:14:00

BEGIN SCAN GROUP 1 17 NOV 87 15:35:3
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	696.19	DEG.	F	AL
C	2	EXHAUST 2	727.14	DEG.	F	AL
C	3	EXHAUST 3	747.51	DEG.	F	AL
C	4	EXHAUST 4	718.11	DEG.	F	AL
C	5	EXHAUST 5	735.68	DEG.	F	AL
C	6	EXHAUST 6	708.35	DEG.	F	AL
C	7	ENG. COOL. IN	172.53	DEG.	F	AL
C	8	ENG. COOL. OUT	183.28	DEG.	F	AL
C	9	OIL SUMP	212.48	DEG.	F	AL
C	10	OIL GALLERY	213.44	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	94.565	DEG.	F	AL
C	14	RAD. TOP LEFT	111.28	DEG.	F	AL
C	15	RAD. BTM LEFT	108.48	DEG.	F	AL
C	16	RAD. TOP RIGHT	110.38	DEG.	F	AL
C	17	RAD. BTM RIGHT	112.79	DEG.	F	AL
C	18	GEN. AIR IN	89.283	DEG.	F	AL
C	19	GEN. AIR OUT	109.79	DEG.	F	AL
C	20	GEN. FRAME TOP	95.591	DEG.	F	AL
C	21	GEN. FRAME BTM	95.364	DEG.	F	AL
C	22	GEN. EXCITER	94.587	DEG.	F	AL
C	23	GEN. VOLT. REG.	103.37	DEG.	F	AL
C	24	CONTROL PANEL	98.864	DEG.	F	AL
C	25	RELAY AREA	92.739	DEG.	F	AL
C	26	BATTERY LEFT	107.21	DEG.	F	AL
C	27	BATTERY RIGHT	106.12	DEG.	F	AL
C	28	AIR IN SET	89.348	DEG.	F	AL
C	29	FUEL TANK	100.39	DEG.	F	AL
C	30	FUEL OUTLET	110.55	DEG.	F	AL

END SCAN GROUP 1 17 NOV 87 15:35:40

STOPPED SINGLE SCAN 17 NOV 87 15:35:40

BEGIN SCAN GROUP 1 17 NOV 87 16:34:54
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	713.41	DEG.	F	ALM
C	2	EXHAUST 2	737.05	DEG.	F	ALM
C	3	EXHAUST 3	760.88	DEG.	F	ALM
C	4	EXHAUST 4	726.89	DEG.	F	ALM
C	5	EXHAUST 5	737.15	DEG.	F	ALM
C	6	EXHAUST 6	714.19	DEG.	F	ALM
C	7	ENG. COOL. IN	178.55	DEG.	F	ALM
C	8	ENG. COOL. OUT	183.46	DEG.	F	ALM
C	9	OIL SUMP	205.60	DEG.	F	ALM
C	10	OIL GALLERY	205.49	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	89.959	DEG.	F	ALM
C	14	RAD. TOP LEFT	107.60	DEG.	F	ALM
C	15	RAD. BTM LEFT	104.78	DEG.	F	ALM
C	16	RAD. TOP RIGHT	108.19	DEG.	F	ALM
C	17	RAD. BTM RIGHT	109.61	DEG.	F	ALM
C	18	GEN. AIR IN	84.869	DEG.	F	ALM
C	19	GEN. AIR OUT	103.90	DEG.	F	ALM
C	20	GEN. FRAME TOP	91.890	DEG.	F	ALM
C	21	GEN. FRAME BTM	92.293	DEG.	F	ALM
C	22	GEN. EXCITER	90.319	DEG.	F	ALM
C	23	GEN. VOLT. REG.	99.000	DEG.	F	ALM
C	24	CONTROL PANEL	95.679	DEG.	F	ALM
C	25	RELAY AREA	88.724	DEG.	F	ALM
C	26	BATTERY LEFT	107.12	DEG.	F	ALM
C	27	BATTERY RIGHT	105.98	DEG.	F	ALM
C	28	AIR IN SET	84.676	DEG.	F	ALM
C	29	FUEL TANK	99.100	DEG.	F	ALM
C	30	FUEL OUTLET	115.13	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 16:35:04

STOPPED SINGLE SCAN 17 NOV 87 16:35:04

BEGIN SCAN GROUP 1 17 NOV 87 16:44:13
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	709.47	DEG.	F	ALM
C	2	EXHAUST 2	735.93	DEG.	F	ALM
C	3	EXHAUST 3	755.31	DEG.	F	ALM
C	4	EXHAUST 4	730.29	DEG.	F	ALM
C	5	EXHAUST 5	739.10	DEG.	F	ALM
C	6	EXHAUST 6	719.43	DEG.	F	ALM
C	7	ENG. COOL. IN	171.49	DEG.	F	ALM
C	8	ENG. COOL. OUT	184.29	DEG.	F	ALM
C	9	OIL SUMP	209.89	DEG.	F	ALM
C	10	OIL GALLERY	210.47	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	90.766	DEG.	F	ALM
C	14	RAD. TOP LEFT	108.24	DEG.	F	ALM
C	15	RAD. BTM LEFT	105.10	DEG.	F	ALM
C	16	RAD. TOP RIGHT	108.36	DEG.	F	ALM
C	17	RAD. BTM RIGHT	110.20	DEG.	F	ALM
C	18	GEN. AIR IN	85.558	DEG.	F	ALM
C	19	GEN. AIR OUT	104.82	DEG.	F	ALM
C	20	GEN. FRAME TOP	91.750	DEG.	F	ALM
C	21	GEN. FRAME BTM	91.851	DEG.	F	ALM
C	22	GEN. EXCITER	90.689	DEG.	F	ALM
C	23	GEN. VOLT. REG.	97.908	DEG.	F	ALM
C	24	CONTROL PANEL	95.239	DEG.	F	ALM
C	25	RELAY AREA	88.967	DEG.	F	ALM
C	26	BATTERY LEFT	107.29	DEG.	F	ALM
C	27	BATTERY RIGHT	105.22	DEG.	F	ALM
C	28	AIR IN SET	85.304	DEG.	F	ALM
C	29	FUEL TANK	98.814	DEG.	F	ALM
C	30	FUEL OUTLET	115.17	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 16:44:23

STOPPED SINGLE SCAN 17 NOV 87 16:44:23

BEGIN SCAN GROUP 1 17 NOV 87 16:54:12
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	709.83	DEG.	F	ALM
C	2	EXHAUST 2	734.73	DEG.	F	ALM
C	3	EXHAUST 3	756.34	DEG.	F	ALM
C	4	EXHAUST 4	725.97	DEG.	F	ALM
C	5	EXHAUST 5	738.13	DEG.	F	ALM
C	6	EXHAUST 6	717.12	DEG.	F	ALM
C	7	ENG. COOL. IN	171.45	DEG.	F	ALM
C	8	ENG. COOL. OUT	184.35	DEG.	F	ALM
C	9	OIL SUMP	212.01	DEG.	F	ALM
C	10	OIL GALLERY	212.59	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	90.826	DEG.	F	ALM
C	14	RAD. TOP LEFT	107.85	DEG.	F	ALM
C	15	RAD. BTM LEFT	105.13	DEG.	F	ALM
C	16	RAD. TOP RIGHT	108.17	DEG.	F	ALM
C	17	RAD. BTM RIGHT	110.04	DEG.	F	ALM
C	18	GEN. AIR IN	85.185	DEG.	F	ALM
C	19	GEN. AIR OUT	104.99	DEG.	F	ALM
C	20	GEN. FRAME TOP	91.594	DEG.	F	ALM
C	21	GEN. FRAME BTM	91.774	DEG.	F	ALM
C	22	GEN. EXCITER	90.432	DEG.	F	ALM
C	23	GEN. VOLT. REG.	96.995	DEG.	F	ALM
C	24	CONTROL PANEL	94.703	DEG.	F	ALM
C	25	RELAY AREA	88.581	DEG.	F	ALM
C	26	BATTERY LEFT	107.29	DEG.	F	ALM
C	27	BATTERY RIGHT	104.84	DEG.	F	ALM
C	28	AIR IN SET	84.660	DEG.	F	ALM
C	29	FUEL TANK	98.480	DEG.	F	ALM
C	30	FUEL OUTLET	114.48	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 16:54:22

STOPPED SINGLE SCAN 17 NOV 87 16:54:22

BEGIN SCAN GROUP 1 17 NOV 87 17:19:39
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	710.70	DEG.	F	ALM
C	2	EXHAUST 2	742.59	DEG.	F	ALM
C	3	EXHAUST 3	778.87	DEG.	F	ALM
C	4	EXHAUST 4	742.76	DEG.	F	ALM
C	5	EXHAUST 5	767.46	DEG.	F	ALM
C	6	EXHAUST 6	737.36	DEG.	F	ALM
C	7	ENG. COOL. IN	169.74	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.58	DEG.	F	ALM
C	9	OIL SUMP	213.77	DEG.	F	ALM
C	10	OIL GALLERY	214.17	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	90.567	DEG.	F	ALM
C	14	RAD. TOP LEFT	107.22	DEG.	F	ALM
C	15	RAD. BTM LEFT	103.61	DEG.	F	ALM
C	16	RAD. TOP RIGHT	105.43	DEG.	F	ALM
C	17	RAD. BTM RIGHT	107.84	DEG.	F	ALM
C	18	GEN. AIR IN	84.778	DEG.	F	ALM
C	19	GEN. AIR OUT	104.00	DEG.	F	ALM
C	20	GEN. FRAME TOP	90.415	DEG.	F	ALM
C	21	GEN. FRAME BTM	90.590	DEG.	F	ALM
C	22	GEN. EXCITER	89.830	DEG.	F	ALM
C	23	GEN. VOLT. REG.	96.529	DEG.	F	ALM
C	24	CONTROL PANEL	94.358	DEG.	F	ALM
C	25	RELAY AREA	87.978	DEG.	F	ALM
C	26	BATTERY LEFT	107.69	DEG.	F	ALM
C	27	BATTERY RIGHT	105.98	DEG.	F	ALM
C	28	AIR IN SET	84.055	DEG.	F	ALM
C	29	FUEL TANK	97.662	DEG.	F	ALM
C	30	FUEL OUTLET	113.30	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 17:19:49

STOPPED SINGLE SCAN 17 NOV 87 17:19:49

BEGIN SCAN GROUP 1 17 NOV 87 17:33:04
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	692.22	DEG.	F	ALM
C	2	EXHAUST 2	722.74	DEG.	F	ALM
C	3	EXHAUST 3	745.84	DEG.	F	ALM
C	4	EXHAUST 4	718.32	DEG.	F	ALM
C	5	EXHAUST 5	738.79	DEG.	F	ALM
C	6	EXHAUST 6	711.46	DEG.	F	ALM
C	7	ENG. COOL. IN	169.55	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.58	DEG.	F	ALM
C	9	OIL SUMP	212.15	DEG.	F	ALM
C	10	OIL GALLERY	212.69	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	89.228	DEG.	F	ALM
C	14	RAD. TOP LEFT	186.52	DEG.	F	ALM
C	15	RAD. BTM LEFT	183.18	DEG.	F	ALM
C	16	RAD. TOP RIGHT	185.62	DEG.	F	ALM
C	17	RAD. BTM RIGHT	187.71	DEG.	F	ALM
C	18	GEN. AIR IN	83.612	DEG.	F	ALM
C	19	GEN. AIR OUT	183.88	DEG.	F	ALM
C	20	GEN. FRAME TOP	89.394	DEG.	F	ALM
C	21	GEN. FRAME BTM	89.729	DEG.	F	ALM
C	22	GEN. EXCITER	88.692	DEG.	F	ALM
C	23	GEN. VOLT. REG.	95.495	DEG.	F	ALM
C	24	CONTROL PANEL	93.374	DEG.	F	ALM
C	25	RELAY AREA	86.833	DEG.	F	ALM
C	26	BATTERY LEFT	186.74	DEG.	F	ALM
C	27	BATTERY RIGHT	185.42	DEG.	F	ALM
C	28	AIR IN SET	83.649	DEG.	F	ALM
C	29	FUEL TANK	97.883	DEG.	F	ALM
C	30	FUEL OUTLET	113.38	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 17:33:14

STOPPED SINGLE SCAN 17 NOV 87 17:33:14

BEGIN SCAN GROUP 1 17 NOV 87 17:34:05
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	739.96	DEG.	F	ALM
C	2	EXHAUST 2	765.73	DEG.	F	ALM
C	3	EXHAUST 3	795.58	DEG.	F	ALM
C	4	EXHAUST 4	767.82	DEG.	F	ALM
C	5	EXHAUST 5	793.28	DEG.	F	ALM
C	6	EXHAUST 6	759.23	DEG.	F	ALM
C	7	ENG. COOL. IN	168.88	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.16	DEG.	F	ALM
C	9	OIL SUMP	211.93	DEG.	F	ALM
C	10	OIL GALLERY	212.62	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	89.321	DEG.	F	ALM
C	14	RAD. TOP LEFT	186.22	DEG.	F	ALM
C	15	RAD. BTM LEFT	182.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	185.12	DEG.	F	ALM
C	17	RAD. BTM RIGHT	187.37	DEG.	F	ALM
C	18	GEN. AIR IN	83.591	DEG.	F	ALM
C	19	GEN. AIR OUT	183.32	DEG.	F	ALM
C	20	GEN. FRAME TOP	89.482	DEG.	F	ALM
C	21	GEN. FRAME BTM	89.812	DEG.	F	ALM
C	22	GEN. EXCITER	88.748	DEG.	F	ALM
C	23	GEN. VOLT. REG.	95.458	DEG.	F	ALM
C	24	CONTROL PANEL	93.228	DEG.	F	ALM
C	25	RELAY AREA	86.748	DEG.	F	ALM
C	26	BATTERY LEFT	186.68	DEG.	F	ALM
C	27	BATTERY RIGHT	185.36	DEG.	F	ALM
C	28	AIR IN SET	82.912	DEG.	F	ALM
C	29	FUEL TANK	97.812	DEG.	F	ALM
C	30	FUEL OUTLET	112.88	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 17:34:15

STOPPED SINGLE SCAN 17 NOV 87 17:34:15

BEGIN SCAN GROUP 1 17 NOV 87 17:46:5
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	692.19	DEG.	F	AL
C	2	EXHAUST 2	723.67	DEG.	F	AL
C	3	EXHAUST 3	746.68	DEG.	F	AL
C	4	EXHAUST 4	719.42	DEG.	F	AL
C	5	EXHAUST 5	735.32	DEG.	F	AL
C	6	EXHAUST 6	712.11	DEG.	F	AL
C	7	ENG. COOL. IN	169.87	DEG.	F	AL
C	8	ENG. COOL. OUT	182.87	DEG.	F	AL
C	9	OIL SUMP	211.58	DEG.	F	AL
C	10	OIL GALLERY	212.81	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	89.848	DEG.	F	AL
C	14	RAD. TOP LEFT	187.24	DEG.	F	AL
C	15	RAD. BTM LEFT	183.75	DEG.	F	AL
C	16	RAD. TOP RIGHT	185.94	DEG.	F	AL
C	17	RAD. BTM RIGHT	188.16	DEG.	F	AL
C	18	GEN. AIR IN	84.886	DEG.	F	AL
C	19	GEN. AIR OUT	184.14	DEG.	F	AL
C	20	GEN. FRAME TOP	89.698	DEG.	F	AL
C	21	GEN. FRAME BTM	89.844	DEG.	F	AL
C	22	GEN. EXCITER	89.589	DEG.	F	AL
C	23	GEN. VOLT. REG.	94.826	DEG.	F	AL
C	24	CONTROL PANEL	92.885	DEG.	F	AL
C	25	RELAY AREA	87.588	DEG.	F	AL
C	26	BATTERY LEFT	186.16	DEG.	F	AL
C	27	BATTERY RIGHT	184.52	DEG.	F	AL
C	28	AIR IN SET	84.989	DEG.	F	AL
C	29	FUEL TANK	96.437	DEG.	F	AL
C	30	FUEL OUTLET	111.18	DEG.	F	AL

END SCAN GROUP 1 17 NOV 87 17:47:8

STOPPED SINGLE SCAN 17 NOV 87 17:47:8

BEGIN SCAN GROUP 1 17 NOV 87 17:48:3
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	732.23	DEG.	F	AL
C	2	EXHAUST 2	764.69	DEG.	F	AL
C	3	EXHAUST 3	792.21	DEG.	F	AL
C	4	EXHAUST 4	763.18	DEG.	F	AL
C	5	EXHAUST 5	787.37	DEG.	F	AL
C	6	EXHAUST 6	756.58	DEG.	F	AL
C	7	ENG. COOL. IN	169.37	DEG.	F	AL
C	8	ENG. COOL. OUT	181.69	DEG.	F	AL
C	9	OIL SUMP	211.62	DEG.	F	AL
C	10	OIL GALLERY	212.88	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	89.662	DEG.	F	AL
C	14	RAD. TOP LEFT	186.16	DEG.	F	AL
C	15	RAD. BTM LEFT	183.11	DEG.	F	AL
C	16	RAD. TOP RIGHT	185.33	DEG.	F	AL
C	17	RAD. BTM RIGHT	187.65	DEG.	F	AL
C	18	GEN. AIR IN	83.372	DEG.	F	AL
C	19	GEN. AIR OUT	183.23	DEG.	F	AL
C	20	GEN. FRAME TOP	89.422	DEG.	F	AL
C	21	GEN. FRAME BTM	89.731	DEG.	F	AL
C	22	GEN. EXCITER	88.619	DEG.	F	AL
C	23	GEN. VOLT. REG.	94.814	DEG.	F	AL
C	24	CONTROL PANEL	92.819	DEG.	F	AL
C	25	RELAY AREA	86.584	DEG.	F	AL
C	26	BATTERY LEFT	186.18	DEG.	F	AL
C	27	BATTERY RIGHT	184.38	DEG.	F	AL
C	28	AIR IN SET	83.888	DEG.	F	AL
C	29	FUEL TANK	96.351	DEG.	F	AL
C	30	FUEL OUTLET	111.79	DEG.	F	AL

END SCAN GROUP 1 17 NOV 87 17:48:4

STOPPED SINGLE SCAN 17 NOV 87 17:48:4

TEST DATA

NAS

ITEM 30 Kw / 60 Hz
GENERATOR SET
MODIFIED
 MFR. CARRY WELKINS
 MODEL NO. MEP 00574
 SERIAL NO. R35 3774

National Technical Systems
 Scientific Services Group
 Testing Division
 P.O. Box 38
 Hartwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. ML STD 725
 SHEET 1 OF 2
 DATE 18 Nov 1987
 JOB NO. 2555-2146
 PROJ. ENGR.

RECORDER/OBSERVER GC/BST/KM
FC2420 FC2420

METHOD C-11 (DEEP TEST)
PRELIMINARY AND WORKER REGULATION TEST

TEST	LOAD	E	G028	D	E	G088	D	E	G040	D	E	G230	D	ANAL	FEED	FEED	ANAL
TIME	STEP	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC	UAC
1445			STARTED UNIT			STARTED UNIT											
1505	RL	208	208	208	120	120	120	244	255	255	245	251	25	80	60.1	8.3	3.3
1515	RL	208	208	208	120	120	120	244	255	255	245	251	25	80	60.1	8.4	3.4
1525	RL	208	208	208	119.9	120	120	244	255	255	245	251	25	80	60.1	8.6	3.4
1535	RL	208	208	208	119.9	120	120	244	255	255	245	251	25	80	60.1	8.4	3.4
1605	RL	208	208	208	120	120	120	244	255	255	245	251	25	80	60.0	8.4	3.3
1615	RL	208	208	208	119.9	120	120	244	255	255	245	251	25	80	60.0	8.4	3.3
1625	RL	208	208	208	120	120	120	244	255	255	245	251	25	80	60.0	8.4	3.3
1630	RL	208	208	208	119.5	120	120	244	255	255	245	251	25	80	60.0	8.4	3.3
1632	RL	212	212	212	123.5	124	124	0	0	0	0	0	0	99	61.7	3.4	1.4
1637	RL	209	209.5	209.1	119.5	121	120	25	254	254	245	251	25	799	57.9	3.4	3.3
1634	RL	212	212.2	212.1	123.9	124	124	0	0	0	0	0	0	99	61.75	3.4	1.4
1635	RL	209	209.5	209	119.5	121	120	25	254	254	245	251	25	799	57.9	3.4	3.3
1636	RL	212	212.1	212	123.5	124	124	0	0	0	0	0	0	99	61.7	3.5	1.4
1638			APPLIED	UAC	RESISTIVE	LOAD			STABILIZATION								
1640	RL	210	210.5	210	121	121	121	20	21	21	245	25	248	99	60.1	5.2	2.1
1650	RL	210	210.5	210.1	121	121	121	20	21	21	245	25	248	99	60.0	5.2	2.1
1700	RL	210	210.1	210	121	121	121	20	21	21	245	25	248	99	60.0	5.1	2.1
1710	RL	210	210.5	210	121	121	121	20	21	21	245	25	249	99	60.1	5.1	2.1
1711	RL	212	212.1	212	123.5	124	124	0	0	0	0	0	0	99	61.8	3.3	1.3
1712	RL	210	210.5	210.1	121	121	121	20	21	21	245	25	249	99	60.1	5.0	2.1
1713	RL	212	212.1	212	123.5	124	124	0	0	0	0	0	0	99	61.7	3.3	1.3
1714	RL	210	210.5	210	121	121	121	20	21	21	245	25	248	99	60.1	5.0	2.1
1715	RL	212	212.5	212	123.5	124	124	0	0	0	0	0	0	99	61.8	3.3	1.1
1715			START UNIT		DOUB	FEED											
1902			START UNIT		NO PROBLEMS	FEED											
1910	RL	208	208.5	208	118.5	120	119	249	253	253	241	25	249	TEST	60.1	7.9	3.2

VOLUME REGULATION OUT OF SPEC ALL LINE TO NEUTRAL FOR REACTIVE TEST ONLY

NOTES:

TEST DATA



ITEM 30 Kw / 60 Hz

GENERATOR SET

MANAGER

MFGR. LOBBY WELDON

MODEL NO. MAP 000A

National Technical Systems
Scientific Services Group
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MMSD 205

SHEET 2 OF 2

DATE 18 Nov 1987

JOB NO. 553-240

PROJ. ENCR.

RECORDER/OBSERVER CE/BJ/KM

METHOD WHL

FREQUENCY AND VOLTAGE REGULATION TEST

SERIAL NO. R25 3774

FC2420 E62410

TEST TIME	LOAD STOP	E 6028 G2-G3 VAC	D 6028 G2-G3 VAC	E 6028 G1-G2 VAC	D 6040 G1-G2 AC AMPS	E 6040 G1-G2 AC AMPS	D 6040 G1-G2 AC AMPS	E 6230 D 6230 D	POWER FACTOR	FIELD	EXCITER	AMB Temp
1920	RL	208 208.3	208 208.3	118.1 118.1	2.52 2.52	2.51 2.51	2.51 2.51	2.45 2.45	.80	60.1	8.0 3.2	55
1930	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.0	8.0 3.2	57
1940	RL	208 208.5	208 208.5	118.1 118.1	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.0	8.0 3.2	56
1941	RL	208 208.5	208 208.5	118.1 118.1	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
1943	RL	208 208.5	208 208.5	118.1 118.1	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
1944	RL	208 208.5	208 208.5	118.1 118.1	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	56
1945	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	56
1947	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
1948	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
1950	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2000	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2010	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2020	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2021	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2023	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2025	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2026	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2027	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2028	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55
2033	RL	208 208.5	208 208.5	118.5 118.5	2.53 2.53	2.52 2.52	2.52 2.52	2.49 2.49	.80	60.1	8.0 3.2	55

VOLTAGE REGULATION OUT OF SPEC ON LINE TO NEUTRAL FOR REACTIVE TEST ONLY

NOTES:

155 mg

03/11/2024

11804 WEAVING

MODEL NO. MEP 005A

SERIAL NO. 2253774

REF. NO. MIL STD 705-

1 234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980818283848586878889909192939495969798991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291301311321331341351361371381391401411421431441451461471481491501511521531541551561571581591601611621631641651661671681691701711721731741751761771781791801811821831841851861871881891901911921931941951961971981992002012022032042052062072082092102112122132142152162172182192202212222232242252262272282292302312322332342352362372382392402412422432442452462472482492502512522532542552562572582592602612622632642652662672682692702712722732742752762772782792802812822832842852862872882892902912922932942952962972982993003013023033043053063073083093103113123133143153163173183193203213223233243253263273283293303313323333343353363373383393403413423433443453463473483493503513523533543553563573583593603613623633643653663673683693703713723733743753763773783793803813823833843853863873883893903913923933943953963973983994004014024034044054064074084094104114124134144154164174184194204214224234244254264274284294304314324334344354364374384394404414424434444454464474484494504514524534544554564574584594604614624634644654664674684694704714724734744754764774784794804814824834844854864874884894904914924934944954964974984995005015025035045055065075085095105115125135145155165175185195205215225235245255265275285295305315325335345355365375385395405415425435445455465475485495505515525535545555565575585595605615625635645655665675685695705715725735745755765775785795805815825835845855865875885895905915925935945955965975985996006016026036046056066076086096106116126136146156166176186196206216226236246256266276286296306316326336346356366376386396406416426436446456466476486496506516526536546556566576586596606616626636646656666676686696706716726736746756766776786796806816826836846856866876886896906916926936946956966976986997007017027037047057067077087097107117127137147157167177187197207217227237247257267277287297307317327337347357367377387397407417427437447457467477487497507517527537547557567577587597607617627637647657667677687697707717727737747757767777787797807817827837847857867877887897907917927937947957967977987998008018028038048058068078088098108118128138148158168178188198208218228238248258268278288298308318328338348358368378388398408418428438448458468478488498508518528538548558568578588598608618628638648658668678688698708718728738748758768778788798808818828838848858868878888898908918928938948958968978988999009019029039049059069079089099109119129139149159169179189199209219229239249259269279289299309319329339349359369379389399409419429439449459469479489499509519529539549559569579589599609619629639649659669679689699709719729739749759769779789799809819829839849859869879889899909919929939949959969979989991000100110021003100410051006100710081009101010111012101310141015101610171018101910201021102210231024102510261027102810291030103110321033103410351036103710381039104010411042104310441045104610471048104910501051105210531054105510561057105810591060106110621063106410651066106710681069107010711072107310741075107610771078107910801081108210831084108510861087108810891090109110921093109410951096109710981099110011011102110311041105110611071108110911101111111211131114111511161117111811191120112111221123112411251126112711281129113011311132113311341135113611371138113911401141114211431144114511461147114811491150115111521153115411551156115711581159116011611162116311641165116611671168116911701171117211731174117511761177117811791180118111821183118411851186118711881189119011911192119311941195119611971198119912001201120212031204120512061207120812091210121112121213121412151216121712181219122012211222122312241225122612271228122912301231123212331234123512361237123812391240124112421243124412451246124712481249125012511252125312541255125612571258125912601261126212631264126512661267126812691270127112721273127412751276127712781279128012811282128312841285128612871288128912901291129212931294129512961297129812991300

DATE 14 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDED/OBSERVER

**Scientific
Testing Division**

P.O. Box 38

Hollywood, Virginia 22471

Tel: 703 752 5300

3745

REGULATION (METHOD 614.1 RESULTS)

1551

REACTIVE

RESISTIVE

LOAD UNITS SYN.	AUG. V. LINE - LINE	AVG. V LINE - N.	VOLTAGE REG	AVG FREQ RL	AVG. FREQ NL	FREQ REG. %	AUG. V. LINE - LINE	AVG V LINE - N	VOLTAGE REG	AVG FREQ RL	AVG FREQ NL	FREQ REG %
					PRE	DROP						
R/L	209.18			57.93			210.18			60.1		
N/L	212.06		1.38 %		61.71	2.97 %	212.08		0.4 %		61.76	2.76 %
R/L	+	120.17						121.22				
N/L		123.87	3.08 %					123.83	2.15 %	2.16 %		
					POST	DEOP						
R/L	208.14			57.73			208.03			60.0		
N/L	211.88		1.80 %		61.7	2.95 %	212.03		1.92 %		61.77	2.96 %
R/L		119.08						120.35				
N/L		123.78	3.11 %					122.78	2.03 %			

SPRING REACTION OUT OF SPEC-REACTIVE LOAD. MAX ALLOWABLE = 7% AS PER ALLIANCE CONTRACT BY

FREQUENCY + VOLTAGE REGULATION 614.1

BEGIN SCAN GROUP 1 18 NOV 87 15:55:40
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	317.59	DEG.	F	ALM
C	2	EXHAUST 2	338.85	DEG.	F	ALM
C	3	EXHAUST 3	339.85	DEG.	F	ALM
C	4	EXHAUST 4	353.15	DEG.	F	ALM
C	5	EXHAUST 5	355.38	DEG.	F	ALM
C	6	EXHAUST 6	332.42	DEG.	F	ALM
C	7	ENG. COOL. IN	173.16	DEG.	F	ALM
C	8	ENG. COOL. OUT	178.45	DEG.	F	ALM
C	9	OIL SUMP	199.20	DEG.	F	ALM
C	10	OIL GALLERY	196.64	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	92.941	DEG.	F	ALM
C	14	RAD. TOP LEFT	121.89	DEG.	F	ALM
C	15	RAD. BTM LEFT	116.63	DEG.	F	ALM
C	16	RAD. TOP RIGHT	119.26	DEG.	F	ALM
C	17	RAD. BTM RIGHT	117.39	DEG.	F	ALM
C	18	GEN. AIR IN	71.857	DEG.	F	ALM
C	19	GEN. AIR OUT	98.586	DEG.	F	ALM
C	20	GEN. FRAME TOP	82.981	DEG.	F	ALM
C	21	GEN. FRAME BTM	74.894	DEG.	F	ALM
C	22	GEN. EXCITER	86.818	DEG.	F	ALM
C	23	GEN. VOLT. REG.	88.551	DEG.	F	ALM
C	24	CONTROL PANEL	88.884	DEG.	F	ALM
C	25	RELAY AREA	89.785	DEG.	F	ALM
C	26	BATTERY LEFT	93.932	DEG.	F	ALM
C	27	BATTERY RIGHT	97.838	DEG.	F	ALM
C	28	AIR IN SET	67.347	DEG.	F	ALM
C	29	FUEL TANK	75.872	DEG.	F	ALM
C	30	FUEL OUTLET	94.885	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 15:55:50

STOPPED SINGLE SCAN 18 NOV 87 15:55:50

BEGIN SCAN GROUP 1 18 NOV 87 15:57:34
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	658.51	DEG.	F	ALM
C	2	EXHAUST 2	679.26	DEG.	F	ALM
C	3	EXHAUST 3	691.38	DEG.	F	ALM
C	4	EXHAUST 4	663.41	DEG.	F	ALM
C	5	EXHAUST 5	673.34	DEG.	F	ALM
C	6	EXHAUST 6	641.31	DEG.	F	ALM
C	7	ENG. COOL. IN	168.48	DEG.	F	ALM
C	8	ENG. COOL. OUT	175.65	DEG.	F	ALM
C	9	OIL SUMP	196.36	DEG.	F	ALM
C	10	OIL GALLERY	196.71	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	82.286	DEG.	F	ALM
C	14	RAD. TOP LEFT	117.87	DEG.	F	ALM
C	15	RAD. BTM LEFT	113.62	DEG.	F	ALM
C	16	RAD. TOP RIGHT	115.77	DEG.	F	ALM
C	17	RAD. BTM RIGHT	113.82	DEG.	F	ALM
C	18	GEN. AIR IN	69.948	DEG.	F	ALM
C	19	GEN. AIR OUT	88.126	DEG.	F	ALM
C	20	GEN. FRAME TOP	82.632	DEG.	F	ALM
C	21	GEN. FRAME BTM	77.683	DEG.	F	ALM
C	22	GEN. EXCITER	77.397	DEG.	F	ALM
C	23	GEN. VOLT. REG.	88.685	DEG.	F	ALM
C	24	CONTROL PANEL	81.173	DEG.	F	ALM
C	25	RELAY AREA	76.367	DEG.	F	ALM
C	26	BATTERY LEFT	93.735	DEG.	F	ALM
C	27	BATTERY RIGHT	97.895	DEG.	F	ALM
C	28	AIR IN SET	66.576	DEG.	F	ALM
C	29	FUEL TANK	75.983	DEG.	F	ALM
C	30	FUEL OUTLET	108.98	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 15:57:44

STOPPED SINGLE SCAN 18 NOV 87 15:57:44

BEGIN SCAN GROUP 1 18 NOV 87 16:08:31
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	668.48	DEG.	F	ALM
C	2	EXHAUST 2	698.38	DEG.	F	ALM
C	3	EXHAUST 3	722.84	DEG.	F	ALM
C	4	EXHAUST 4	691.17	DEG.	F	ALM
C	5	EXHAUST 5	787.57	DEG.	F	ALM
C	6	EXHAUST 6	682.55	DEG.	F	ALM
C	7	ENG. COOL. IN	163.62	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.14	DEG.	F	ALM
C	9	OIL SUMP	284.28	DEG.	F	ALM
C	10	OIL GALLERY	284.53	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	71.616	DEG.	F	ALM
C	14	RAD. TOP LEFT	97.895	DEG.	F	ALM
C	15	RAD. BTM LEFT	93.311	DEG.	F	ALM
C	16	RAD. TOP RIGHT	99.685	DEG.	F	ALM
C	17	RAD. BTM RIGHT	98.928	DEG.	F	ALM
C	18	GEN. AIR IN	64.385	DEG.	F	ALM
C	19	GEN. AIR OUT	84.244	DEG.	F	ALM
C	20	GEN. FRAME TOP	76.986	DEG.	F	ALM
C	21	GEN. FRAME BTM	74.638	DEG.	F	ALM
C	22	GEN. EXCITER	72.418	DEG.	F	ALM
C	23	GEN. VOLT. REG.	88.866	DEG.	F	ALM
C	24	CONTROL PANEL	78.813	DEG.	F	ALM
C	25	RELAY AREA	78.856	DEG.	F	ALM
C	26	BATTERY LEFT	94.998	DEG.	F	ALM
C	27	BATTERY RIGHT	99.253	DEG.	F	ALM
C	28	AIR IN SET	63.338	DEG.	F	ALM
C	29	FUEL TANK	76.857	DEG.	F	ALM
C	30	FUEL OUTLET	108.76	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:08:41

STOPPED SINGLE SCAN 18 NOV 87 16:08:41

BEGIN SCAN GROUP 1 18 NOV 87 16:13:50
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	663.37	DEG.	F	ALM
C	2	EXHAUST 2	696.63	DEG.	F	ALM
C	3	EXHAUST 3	718.91	DEG.	F	ALM
C	4	EXHAUST 4	687.54	DEG.	F	ALM
C	5	EXHAUST 5	782.69	DEG.	F	ALM
C	6	EXHAUST 6	679.85	DEG.	F	ALM
C	7	ENG. COOL. IN	163.88	DEG.	F	ALM
C	8	ENG. COOL. OUT	164.53	DEG.	F	ALM
C	9	OIL SUMP	285.41	DEG.	F	ALM
C	10	OIL GALLERY	285.75	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	69.854	DEG.	F	ALM
C	14	RAD. TOP LEFT	96.364	DEG.	F	ALM
C	15	RAD. BTM LEFT	92.499	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.678	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.372	DEG.	F	ALM
C	18	GEN. AIR IN	62.683	DEG.	F	ALM
C	19	GEN. AIR OUT	82.994	DEG.	F	ALM
C	20	GEN. FRAME TOP	75.985	DEG.	F	ALM
C	21	GEN. FRAME BTM	73.997	DEG.	F	ALM
C	22	GEN. EXCITER	71.331	DEG.	F	ALM
C	23	GEN. VOLT. REG.	79.483	DEG.	F	ALM
C	24	CONTROL PANEL	77.938	DEG.	F	ALM
C	25	RELAY AREA	68.884	DEG.	F	ALM
C	26	BATTERY LEFT	94.981	DEG.	F	ALM
C	27	BATTERY RIGHT	99.377	DEG.	F	ALM
C	28	AIR IN SET	61.372	DEG.	F	ALM
C	29	FUEL TANK	77.195	DEG.	F	ALM
C	30	FUEL OUTLET	99.177	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:14:08

STOPPED SINGLE SCAN 18 NOV 87 16:14:08

BEGIN SCAN GROUP 1 18 NOV 87 16:24:06
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	662.86	DEG.	F	ALM
C	2	EXHAUST 2	691.47	DEG.	F	ALM
C	3	EXHAUST 3	716.78	DEG.	F	ALM
C	4	EXHAUST 4	684.73	DEG.	F	ALM
C	5	EXHAUST 5	782.63	DEG.	F	ALM
C	6	EXHAUST 6	678.81	DEG.	F	ALM
C	7	ENG. COOL. IN	162.65	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.75	DEG.	F	ALM
C	9	OIL SUMP	286.32	DEG.	F	ALM
C	10	OIL GALLERY	286.43	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	68.383	DEG.	F	ALM
C	14	RAD. TOP LEFT	96.679	DEG.	F	ALM
C	15	RAD. BTM LEFT	92.688	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.539	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.734	DEG.	F	ALM
C	18	GEN. AIR IN	61.283	DEG.	F	ALM
C	19	GEN. AIR OUT	82.264	DEG.	F	ALM
C	20	GEN. FRAME TOP	74.194	DEG.	F	ALM
C	21	GEN. FRAME BTM	71.488	DEG.	F	ALM
C	22	GEN. EXCITER	69.872	DEG.	F	ALM
C	23	GEN. VOLT. REG.	78.833	DEG.	F	ALM
C	24	CONTROL PANEL	76.129	DEG.	F	ALM
C	25	RELAY AREA	67.192	DEG.	F	ALM
C	26	BATTERY LEFT	94.787	DEG.	F	ALM
C	27	BATTERY RIGHT	99.874	DEG.	F	ALM
C	28	AIR IN SET	61.287	DEG.	F	ALM
C	29	FUEL TANK	77.235	DEG.	F	ALM
C	30	FUEL OUTLET	97.898	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:24:16

STOPPED SINGLE SCAN 18 NOV 87 16:24:16

BEGIN SCAN GROUP 1 18 NOV 87 16:28:47
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	667.28	DEG.	F	ALM
C	2	EXHAUST 2	692.18	DEG.	F	ALM
C	3	EXHAUST 3	717.27	DEG.	F	ALM
C	4	EXHAUST 4	686.57	DEG.	F	ALM
C	5	EXHAUST 5	784.49	DEG.	F	ALM
C	6	EXHAUST 6	679.52	DEG.	F	ALM
C	7	ENG. COOL. IN	162.66	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.83	DEG.	F	ALM
C	9	OIL SUMP	286.49	DEG.	F	ALM
C	10	OIL GALLERY	286.63	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	68.618	DEG.	F	ALM
C	14	RAD. TOP LEFT	96.121	DEG.	F	ALM
C	15	RAD. BTM LEFT	92.387	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.188	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.234	DEG.	F	ALM
C	18	GEN. AIR IN	68.821	DEG.	F	ALM
C	19	GEN. AIR OUT	81.444	DEG.	F	ALM
C	20	GEN. FRAME TOP	73.936	DEG.	F	ALM
C	21	GEN. FRAME BTM	78.829	DEG.	F	ALM
C	22	GEN. EXCITER	69.633	DEG.	F	ALM
C	23	GEN. VOLT. REG.	77.468	DEG.	F	ALM
C	24	CONTROL PANEL	75.482	DEG.	F	ALM
C	25	RELAY AREA	66.511	DEG.	F	ALM
C	26	BATTERY LEFT	94.915	DEG.	F	ALM
C	27	BATTERY RIGHT	99.869	DEG.	F	ALM
C	28	AIR IN SET	68.879	DEG.	F	ALM
C	29	FUEL TANK	77.236	DEG.	F	ALM
C	30	FUEL OUTLET	96.484	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:28:57

STOPPED SINGLE SCAN 18 NOV 87 16:28:57

BEGIN SCAN GROUP 1 18 NOV 87 16:31:11
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	327.55	DEG.	F	ALM
C	2	EXHAUST 2	356.59	DEG.	F	ALM
C	3	EXHAUST 3	343.95	DEG.	F	ALM
C	4	EXHAUST 4	384.28	DEG.	F	ALM
C	5	EXHAUST 5	391.79	DEG.	F	ALM
C	6	EXHAUST 6	384.62	DEG.	F	ALM
C	7	ENG. COOL. IN	155.35	DEG.	F	ALM
C	8	ENG. COOL. OUT	171.89	DEG.	F	ALM
C	9	OIL SUMP	285.98	DEG.	F	ALM
C	10	OIL GALLERY	285.89	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	68.484	DEG.	F	ALM
C	14	RAD. TOP LEFT	184.94	DEG.	F	ALM
C	15	RAD. BTM LEFT	188.79	DEG.	F	ALM
C	16	RAD. TOP RIGHT	184.82	DEG.	F	ALM
C	17	RAD. BTM RIGHT	182.52	DEG.	F	ALM
C	18	GEN. AIR IN	61.891	DEG.	F	ALM
C	19	GEN. AIR OUT	88.976	DEG.	F	ALM
C	20	GEN. FRAME TOP	73.611	DEG.	F	ALM
C	21	GEN. FRAME BTM	78.221	DEG.	F	ALM
C	22	GEN. EXCITER	69.492	DEG.	F	ALM
C	23	GEN. VOLT. REG.	77.226	DEG.	F	ALM
C	24	CONTROL PANEL	75.887	DEG.	F	ALM
C	25	RELAY AREA	66.198	DEG.	F	ALM
C	26	BATTERY LEFT	95.286	DEG.	F	ALM
C	27	BATTERY RIGHT	188.16	DEG.	F	ALM
C	28	AIR IN SET	59.463	DEG.	F	ALM
C	29	FUEL TANK	77.274	DEG.	F	ALM
C	30	FUEL OUTLET	97.828	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:31:21

STOPPED SINGLE SCAN 18 NOV 87 16:31:21

BEGIN SCAN GROUP 1 18 NOV 87 16:32:35
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	639.52	DEG.	F	ALM
C	2	EXHAUST 2	666.36	DEG.	F	ALM
C	3	EXHAUST 3	688.53	DEG.	F	ALM
C	4	EXHAUST 4	656.15	DEG.	F	ALM
C	5	EXHAUST 5	673.94	DEG.	F	ALM
C	6	EXHAUST 6	644.86	DEG.	F	ALM
C	7	ENG. COOL. IN	159.38	DEG.	F	ALM
C	8	ENG. COOL. OUT	173.54	DEG.	F	ALM
C	9	OIL SUMP	285.82	DEG.	F	ALM
C	10	OIL GALLERY	285.13	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	71.189	DEG.	F	ALM
C	14	RAD. TOP LEFT	119.59	DEG.	F	ALM
C	15	RAD. BTM LEFT	116.48	DEG.	F	ALM
C	16	RAD. TOP RIGHT	118.45	DEG.	F	ALM
C	17	RAD. BTM RIGHT	116.41	DEG.	F	ALM
C	18	GEN. AIR IN	78.178	DEG.	F	ALM
C	19	GEN. AIR OUT	83.646	DEG.	F	ALM
C	20	GEN. FRAME TOP	74.828	DEG.	F	ALM
C	21	GEN. FRAME BTM	73.192	DEG.	F	ALM
C	22	GEN. EXCITER	71.977	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.959	DEG.	F	ALM
C	24	CONTROL PANEL	74.512	DEG.	F	ALM
C	25	RELAY AREA	68.858	DEG.	F	ALM
C	26	BATTERY LEFT	95.258	DEG.	F	ALM
C	27	BATTERY RIGHT	188.18	DEG.	F	ALM
C	28	AIR IN SET	68.192	DEG.	F	ALM
C	29	FUEL TANK	77.395	DEG.	F	ALM
C	30	FUEL OUTLET	97.114	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:32:45

STOPPED SINGLE SCAN 18 NOV 87 16:32:45

BEGIN SCAN GROUP 1 18 NOV 87 16:33:06
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	438.18	DEG.	F	ALM
C	2	EXHAUST 2	462.25	DEG.	F	ALM
C	3	EXHAUST 3	451.89	DEG.	F	ALM
C	4	EXHAUST 4	472.33	DEG.	F	ALM
C	5	EXHAUST 5	481.18	DEG.	F	ALM
C	6	EXHAUST 6	475.06	DEG.	F	ALM
C	7	ENG. COOL. IN	164.98	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.27	DEG.	F	ALM
C	9	OIL SUMP	285.11	DEG.	F	ALM
C	10	OIL GALLERY	285.22	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	71.963	DEG.	F	ALM
C	14	RAD. TOP LEFT	117.79	DEG.	F	ALM
C	15	RAD. BTM LEFT	113.87	DEG.	F	ALM
C	16	RAD. TOP RIGHT	116.93	DEG.	F	ALM
C	17	RAD. BTM RIGHT	115.35	DEG.	F	ALM
C	18	GEN. AIR IN	67.892	DEG.	F	ALM
C	19	GEN. AIR OUT	83.292	DEG.	F	ALM
C	20	GEN. FRAME TOP	75.317	DEG.	F	ALM
C	21	GEN. FRAME BTM	73.792	DEG.	F	ALM
C	22	GEN. EXCITER	72.112	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.936	DEG.	F	ALM
C	24	CONTROL PANEL	74.387	DEG.	F	ALM
C	25	RELAY AREA	68.111	DEG.	F	ALM
C	26	BATTERY LEFT	95.483	DEG.	F	ALM
C	27	BATTERY RIGHT	188.39	DEG.	F	ALM
C	28	AIR IN SET	68.433	DEG.	F	ALM
C	29	FUEL TANK	77.583	DEG.	F	ALM
C	30	FUEL OUTLET	96.664	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:33:16

STOPPED SINGLE SCAN 18 NOV 87 16:33:16

BEGIN SCAN GROUP 1 18 NOV 87 16:35:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	483.54	DEG.	F	AL
C	2	EXHAUST 2	426.79	DEG.	F	AL
C	3	EXHAUST 3	414.53	DEG.	F	AL
C	4	EXHAUST 4	443.16	DEG.	F	AL
C	5	EXHAUST 5	451.98	DEG.	F	AL
C	6	EXHAUST 6	446.67	DEG.	F	AL
C	7	ENG. COOL. IN	161.46	DEG.	F	AL
C	8	ENG. COOL. OUT	177.92	DEG.	F	AL
C	9	OIL SUMP	284.92	DEG.	F	AL
C	10	OIL GALLERY	284.97	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	71.353	DEG.	F	AL
C	14	RAD. TOP LEFT	187.72	DEG.	F	AL
C	15	RAD. BTM LEFT	182.18	DEG.	F	AL
C	16	RAD. TOP RIGHT	186.68	DEG.	F	AL
C	17	RAD. BTM RIGHT	185.21	DEG.	F	AL
C	18	GEN. AIR IN	62.188	DEG.	F	AL
C	19	GEN. AIR OUT	88.718	DEG.	F	AL
C	20	GEN. FRAME TOP	75.185	DEG.	F	AL
C	21	GEN. FRAME BTM	72.213	DEG.	F	AL
C	22	GEN. EXCITER	72.184	DEG.	F	AL
C	23	GEN. VOLT. REG.	76.987	DEG.	F	AL
C	24	CONTROL PANEL	74.288	DEG.	F	AL
C	25	RELAY AREA	66.833	DEG.	F	AL
C	26	BATTERY LEFT	96.134	DEG.	F	AL
C	27	BATTERY RIGHT	181.88	DEG.	F	AL
C	28	AIR IN SET	59.853	DEG.	F	AL
C	29	FUEL TANK	77.936	DEG.	F	AL
C	30	FUEL OUTLET	98.416	DEG.	F	AL

END SCAN GROUP 1 18 NOV 87 16:35:23

STOPPED SINGLE SCAN 18 NOV 87 16:35:23

BEGIN SCAN GROUP 1 18 NOV 87 16:34:08
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	568.89	DEG.	F	ALM
C	2	EXHAUST 2	584.23	DEG.	F	ALM
C	3	EXHAUST 3	681.96	DEG.	F	ALM
C	4	EXHAUST 4	589.64	DEG.	F	ALM
C	5	EXHAUST 5	686.85	DEG.	F	ALM
C	6	EXHAUST 6	575.36	DEG.	F	ALM
C	7	ENG. COOL. IN	168.46	DEG.	F	ALM
C	8	ENG. COOL. OUT	176.14	DEG.	F	ALM
C	9	OIL SUMP	285.88	DEG.	F	ALM
C	10	OIL GALLERY	285.84	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	71.716	DEG.	F	ALM
C	14	RAD. TOP LEFT	187.18	DEG.	F	ALM
C	15	RAD. BTM LEFT	182.81	DEG.	F	ALM
C	16	RAD. TOP RIGHT	186.68	DEG.	F	ALM
C	17	RAD. BTM RIGHT	185.26	DEG.	F	ALM
C	18	GEN. AIR IN	62.786	DEG.	F	ALM
C	19	GEN. AIR OUT	88.736	DEG.	F	ALM
C	20	GEN. FRAME TOP	75.338	DEG.	F	ALM
C	21	GEN. FRAME BTM	72.537	DEG.	F	ALM
C	22	GEN. EXCITER	71.762	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.954	DEG.	F	ALM
C	24	CONTROL PANEL	74.297	DEG.	F	ALM
C	25	RELAY AREA	66.985	DEG.	F	ALM
C	26	BATTERY LEFT	95.722	DEG.	F	ALM
C	27	BATTERY RIGHT	188.72	DEG.	F	ALM
C	28	AIR IN SET	68.292	DEG.	F	ALM
C	29	FUEL TANK	77.774	DEG.	F	ALM
C	30	FUEL OUTLET	98.811	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:34:18

STOPPED SINGLE SCAN 18 NOV 87 16:34:18

BEGIN SCAN GROUP 1 18 NOV 87 16:37:20
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	622.58	DEG.	F	ALM
C	2	EXHAUST 2	649.82	DEG.	F	ALM
C	3	EXHAUST 3	661.38	DEG.	F	ALM
C	4	EXHAUST 4	637.86	DEG.	F	ALM
C	5	EXHAUST 5	654.28	DEG.	F	ALM
C	6	EXHAUST 6	631.95	DEG.	F	ALM
C	7	ENG. COOL. IN	168.26	DEG.	F	ALM
C	8	ENG. COOL. OUT	175.48	DEG.	F	ALM
C	9	OIL SUMP	284.17	DEG.	F	ALM
C	10	OIL GALLERY	284.34	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	71.136	DEG.	F	ALM
C	14	RAD. TOP LEFT	113.67	DEG.	F	ALM
C	15	RAD. BTM LEFT	118.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	113.38	DEG.	F	ALM
C	17	RAD. BTM RIGHT	118.98	DEG.	F	ALM
C	18	GEN. AIR IN	64.137	DEG.	F	ALM
C	19	GEN. AIR OUT	88.935	DEG.	F	ALM
C	20	GEN. FRAME TOP	75.282	DEG.	F	ALM
C	21	GEN. FRAME BTM	73.784	DEG.	F	ALM
C	22	GEN. EXCITER	71.557	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.827	DEG.	F	ALM
C	24	CONTROL PANEL	74.866	DEG.	F	ALM
C	25	RELAY AREA	67.836	DEG.	F	ALM
C	26	BATTERY LEFT	96.652	DEG.	F	ALM
C	27	BATTERY RIGHT	181.43	DEG.	F	ALM
C	28	AIR IN SET	59.328	DEG.	F	ALM
C	29	FUEL TANK	78.888	DEG.	F	ALM
C	30	FUEL OUTLET	99.867	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:37:29

STOPPED SINGLE SCAN 18 NOV 87 16:37:29

BEGIN SCAN GROUP 1 18 NOV 87 16:42:54
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	641.47	DEG.	F	ALM
C	2	EXHAUST 2	674.11	DEG.	F	ALM
C	3	EXHAUST 3	693.51	DEG.	F	ALM
C	4	EXHAUST 4	664.18	DEG.	F	ALM
C	5	EXHAUST 5	688.88	DEG.	F	ALM
C	6	EXHAUST 6	659.40	DEG.	F	ALM
C	7	ENG. COOL. IN	163.33	DEG.	F	ALM
C	8	ENG. COOL. OUT	180.32	DEG.	F	ALM
C	9	OIL SUMP	285.57	DEG.	F	ALM
C	10	OIL GALLERY	285.83	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.275	DEG.	F	ALM
C	14	RAD. TOP LEFT	98.248	DEG.	F	ALM
C	15	RAD. BTM LEFT	93.687	DEG.	F	ALM
C	16	RAD. TOP RIGHT	95.227	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.598	DEG.	F	ALM
C	18	GEN. AIR IN	58.245	DEG.	F	ALM
C	19	GEN. AIR OUT	76.879	DEG.	F	ALM
C	20	GEN. FRAME TOP	72.318	DEG.	F	ALM
C	21	GEN. FRAME BTM	69.747	DEG.	F	ALM
C	22	GEN. EXCITER	68.523	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.218	DEG.	F	ALM
C	24	CONTROL PANEL	73.865	DEG.	F	ALM
C	25	RELAY AREA	63.888	DEG.	F	ALM
C	26	BATTERY LEFT	97.489	DEG.	F	ALM
C	27	BATTERY RIGHT	101.71	DEG.	F	ALM
C	28	AIR IN SET	58.641	DEG.	F	ALM
C	29	FUEL TANK	78.194	DEG.	F	ALM
C	30	FUEL OUTLET	98.422	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:43:04

STOPPED SINGLE SCAN 18 NOV 87 16:43:04

BEGIN SCAN GROUP 1 18 NOV 87 16:49:28
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	644.48	DEG.	F	ALM
C	2	EXHAUST 2	675.73	DEG.	F	ALM
C	3	EXHAUST 3	694.59	DEG.	F	ALM
C	4	EXHAUST 4	666.48	DEG.	F	ALM
C	5	EXHAUST 5	684.27	DEG.	F	ALM
C	6	EXHAUST 6	662.58	DEG.	F	ALM
C	7	ENG. COOL. IN	162.49	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.76	DEG.	F	ALM
C	9	OIL SUMP	285.88	DEG.	F	ALM
C	10	OIL GALLERY	286.15	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.797	DEG.	F	ALM
C	14	RAD. TOP LEFT	98.488	DEG.	F	ALM
C	15	RAD. BTM LEFT	94.194	DEG.	F	ALM
C	16	RAD. TOP RIGHT	99.152	DEG.	F	ALM
C	17	RAD. BTM RIGHT	98.847	DEG.	F	ALM
C	18	GEN. AIR IN	59.678	DEG.	F	ALM
C	19	GEN. AIR OUT	76.888	DEG.	F	ALM
C	20	GEN. FRAME TOP	71.188	DEG.	F	ALM
C	21	GEN. FRAME BTM	69.849	DEG.	F	ALM
C	22	GEN. EXCITER	68.698	DEG.	F	ALM
C	23	GEN. VOLT. REG.	75.367	DEG.	F	ALM
C	24	CONTROL PANEL	73.121	DEG.	F	ALM
C	25	RELAY AREA	65.379	DEG.	F	ALM
C	26	BATTERY LEFT	96.919	DEG.	F	ALM
C	27	BATTERY RIGHT	101.59	DEG.	F	ALM
C	28	AIR IN SET	68.148	DEG.	F	ALM
C	29	FUEL TANK	78.199	DEG.	F	ALM
C	30	FUEL OUTLET	97.399	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:49:38

STOPPED SINGLE SCAN 18 NOV 87 16:49:38

BEGIN SCAN GROUP 1 18 NOV 87 16:59:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	643.24	DEG.	F	ALM
C	2	EXHAUST 2	672.65	DEG.	F	ALM
C	3	EXHAUST 3	691.68	DEG.	F	ALM
C	4	EXHAUST 4	662.25	DEG.	F	ALM
C	5	EXHAUST 5	681.12	DEG.	F	ALM
C	6	EXHAUST 6	661.62	DEG.	F	ALM
C	7	ENG. COOL. IN	161.75	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.24	DEG.	F	ALM
C	9	OIL SUMP	285.78	DEG.	F	ALM
C	10	OIL GALLERY	286.85	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.454	DEG.	F	ALM
C	14	RAD. TOP LEFT	97.989	DEG.	F	ALM
C	15	RAD. BTM LEFT	93.548	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.262	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.177	DEG.	F	ALM
C	18	GEN. AIR IN	57.835	DEG.	F	ALM
C	19	GEN. AIR OUT	74.885	DEG.	F	ALM
C	20	GEN. FRAME TOP	69.428	DEG.	F	ALM
C	21	GEN. FRAME BTM	67.345	DEG.	F	ALM
C	22	GEN. EXCITER	66.952	DEG.	F	ALM
C	23	GEN. VOLT. REG.	74.346	DEG.	F	ALM
C	24	CONTROL PANEL	72.196	DEG.	F	ALM
C	25	RELAY AREA	63.828	DEG.	F	ALM
C	26	BATTERY LEFT	96.624	DEG.	F	ALM
C	27	BATTERY RIGHT	101.52	DEG.	F	ALM
C	28	AIR IN SET	58.824	DEG.	F	ALM
C	29	FUEL TANK	78.334	DEG.	F	ALM
C	30	FUEL OUTLET	95.944	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 16:59:27

STOPPED SINGLE SCAN 18 NOV 87 16:59:27

BEGIN SCAN GROUP 1 18 NOV 87 17:08:41
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	643.98	DEG.	F	ALM
C	2	EXHAUST 2	675.57	DEG.	F	ALM
C	3	EXHAUST 3	693.63	DEG.	F	ALM
C	4	EXHAUST 4	664.52	DEG.	F	ALM
C	5	EXHAUST 5	682.57	DEG.	F	ALM
C	6	EXHAUST 6	662.24	DEG.	F	ALM
C	7	ENG. COOL. IN	161.98	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.34	DEG.	F	ALM
C	9	OIL SUMP	285.63	DEG.	F	ALM
C	10	OIL GALLERY	285.81	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.834	DEG.	F	ALM
C	14	RAD. TOP LEFT	98.142	DEG.	F	ALM
C	15	RAD. BTM LEFT	93.427	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.269	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.262	DEG.	F	ALM
C	18	GEN. AIR IN	58.882	DEG.	F	ALM
C	19	GEN. AIR OUT	74.243	DEG.	F	ALM
C	20	GEN. FRAME TOP	69.138	DEG.	F	ALM
C	21	GEN. FRAME BTM	67.289	DEG.	F	ALM
C	22	GEN. EXCITER	67.498	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.745	DEG.	F	ALM
C	24	CONTROL PANEL	71.675	DEG.	F	ALM
C	25	RELAY AREA	64.185	DEG.	F	ALM
C	26	BATTERY LEFT	96.772	DEG.	F	ALM
C	27	BATTERY RIGHT	101.96	DEG.	F	ALM
C	28	AIR IN SET	58.338	DEG.	F	ALM
C	29	FUEL TANK	78.367	DEG.	F	ALM
C	30	FUEL OUTLET	94.587	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 17:08:51

STOPPED SINGLE SCAN 18 NOV 87 17:08:51

BEGIN SCAN GROUP 1 18 NOV 87 17:09:52
30KW 60HZ GEN SET S-MR25 3774

C	1	EXHAUST 1	478.37	DEG.	F	ALM
C	2	EXHAUST 2	497.18	DEG.	F	ALM
C	3	EXHAUST 3	491.53	DEG.	F	ALM
C	4	EXHAUST 4	505.44	DEG.	F	ALM
C	5	EXHAUST 5	514.27	DEG.	F	ALM
C	6	EXHAUST 6	509.26	DEG.	F	ALM
C	7	ENG. COOL. IN	161.92	DEG.	F	ALM
C	8	ENG. COOL. OUT	178.79	DEG.	F	ALM
C	9	OIL SUMP	205.91	DEG.	F	ALM
C	10	OIL GALLERY	205.72	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.645	DEG.	F	ALM
C	14	RAD. TOP LEFT	97.387	DEG.	F	ALM
C	15	RAD. BTM LEFT	93.124	DEG.	F	ALM
C	16	RAD. TOP RIGHT	97.957	DEG.	F	ALM
C	17	RAD. BTM RIGHT	96.988	DEG.	F	ALM
C	18	GEN. AIR IN	57.211	DEG.	F	ALM
C	19	GEN. AIR OUT	73.651	DEG.	F	ALM
C	20	GEN. FRAME TOP	68.983	DEG.	F	ALM
C	21	GEN. FRAME BTM	67.059	DEG.	F	ALM
C	22	GEN. EXCITER	67.212	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.537	DEG.	F	ALM
C	24	CONTROL PANEL	71.682	DEG.	F	ALM
C	25	RELAY AREA	63.824	DEG.	F	ALM
C	26	BATTERY LEFT	96.775	DEG.	F	ALM
C	27	BATTERY RIGHT	101.75	DEG.	F	ALM
C	28	AIR IN SET	57.428	DEG.	F	ALM
C	29	FUEL TANK	78.235	DEG.	F	ALM
C	30	FUEL OUTLET	93.748	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 17:10:02

STOPPED SINGLE SCAN 18 NOV 87 17:10:02

BEGIN SCAN GROUP 1 18 NOV 87 17:10:51
30KW 60HZ GEN SET S-MR25 3774

C	1	EXHAUST 1	528.49	DEG.	F	ALM
C	2	EXHAUST 2	562.62	DEG.	F	ALM
C	3	EXHAUST 3	578.14	DEG.	F	ALM
C	4	EXHAUST 4	563.64	DEG.	F	ALM
C	5	EXHAUST 5	583.61	DEG.	F	ALM
C	6	EXHAUST 6	558.21	DEG.	F	ALM
C	7	ENG. COOL. IN	155.87	DEG.	F	ALM
C	8	ENG. COOL. OUT	172.87	DEG.	F	ALM
C	9	OIL SUMP	205.31	DEG.	F	ALM
C	10	OIL GALLERY	205.18	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.719	DEG.	F	ALM
C	14	RAD. TOP LEFT	104.58	DEG.	F	ALM
C	15	RAD. BTM LEFT	100.18	DEG.	F	ALM
C	16	RAD. TOP RIGHT	103.25	DEG.	F	ALM
C	17	RAD. BTM RIGHT	101.55	DEG.	F	ALM
C	18	GEN. AIR IN	59.259	DEG.	F	ALM
C	19	GEN. AIR OUT	74.888	DEG.	F	ALM
C	20	GEN. FRAME TOP	68.953	DEG.	F	ALM
C	21	GEN. FRAME BTM	67.851	DEG.	F	ALM
C	22	GEN. EXCITER	67.934	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.548	DEG.	F	ALM
C	24	CONTROL PANEL	71.572	DEG.	F	ALM
C	25	RELAY AREA	63.892	DEG.	F	ALM
C	26	BATTERY LEFT	96.828	DEG.	F	ALM
C	27	BATTERY RIGHT	101.79	DEG.	F	ALM
C	28	AIR IN SET	57.754	DEG.	F	ALM
C	29	FUEL TANK	78.179	DEG.	F	ALM
C	30	FUEL OUTLET	95.337	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 17:11:01

STOPPED SINGLE SCAN 18 NOV 87 17:11:01

BEGIN SCAN GROUP 1 18 NOV 87 17:11:47
30KW 60HZ GEN SET S-MR25 3774

C	1	EXHAUST 1	458.26	DEG.	F	ALM
C	2	EXHAUST 2	478.06	DEG.	F	ALM
C	3	EXHAUST 3	465.19	DEG.	F	ALM
C	4	EXHAUST 4	484.55	DEG.	F	ALM
C	5	EXHAUST 5	491.53	DEG.	F	ALM
C	6	EXHAUST 6	484.84	DEG.	F	ALM
C	7	ENG. COOL. IN	153.91	DEG.	F	ALM
C	8	ENG. COOL. OUT	174.74	DEG.	F	ALM
C	9	OIL SUMP	204.87	DEG.	F	ALM
C	10	OIL GALLERY	204.83	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	68.279	DEG.	F	ALM
C	14	RAD. TOP LEFT	112.56	DEG.	F	ALM
C	15	RAD. BTM LEFT	108.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	111.59	DEG.	F	ALM
C	17	RAD. BTM RIGHT	109.68	DEG.	F	ALM
C	18	GEN. AIR IN	62.118	DEG.	F	ALM
C	19	GEN. AIR OUT	75.532	DEG.	F	ALM
C	20	GEN. FRAME TOP	69.577	DEG.	F	ALM
C	21	GEN. FRAME BTM	68.559	DEG.	F	ALM
C	22	GEN. EXCITER	68.663	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.463	DEG.	F	ALM
C	24	CONTROL PANEL	71.289	DEG.	F	ALM
C	25	RELAY AREA	64.838	DEG.	F	ALM
C	26	BATTERY LEFT	96.845	DEG.	F	ALM
C	27	BATTERY RIGHT	101.84	DEG.	F	ALM
C	28	AIR IN SET	58.255	DEG.	F	ALM
C	29	FUEL TANK	78.875	DEG.	F	ALM
C	30	FUEL OUTLET	94.588	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 17:11:57

STOPPED SINGLE SCAN 18 NOV 87 17:11:57

BEGIN SCAN GROUP 1 18 NOV 87 17:12:36
30KW 60HZ GEN SET S-MR25 3774

C	1	EXHAUST 1	517.87	DEG.	F	ALM
C	2	EXHAUST 2	547.97	DEG.	F	ALM
C	3	EXHAUST 3	565.44	DEG.	F	ALM
C	4	EXHAUST 4	558.99	DEG.	F	ALM
C	5	EXHAUST 5	572.96	DEG.	F	ALM
C	6	EXHAUST 6	545.58	DEG.	F	ALM
C	7	ENG. COOL. IN	168.18	DEG.	F	ALM
C	8	ENG. COOL. OUT	173.86	DEG.	F	ALM
C	9	OIL SUMP	204.49	DEG.	F	ALM
C	10	OIL GALLERY	204.44	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	69.881	DEG.	F	ALM
C	14	RAD. TOP LEFT	111.78	DEG.	F	ALM
C	15	RAD. BTM LEFT	108.36	DEG.	F	ALM
C	16	RAD. TOP RIGHT	111.74	DEG.	F	ALM
C	17	RAD. BTM RIGHT	109.95	DEG.	F	ALM
C	18	GEN. AIR IN	61.356	DEG.	F	ALM
C	19	GEN. AIR OUT	74.987	DEG.	F	ALM
C	20	GEN. FRAME TOP	69.997	DEG.	F	ALM
C	21	GEN. FRAME BTM	69.192	DEG.	F	ALM
C	22	GEN. EXCITER	68.931	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.415	DEG.	F	ALM
C	24	CONTROL PANEL	71.165	DEG.	F	ALM
C	25	RELAY AREA	64.899	DEG.	F	ALM
C	26	BATTERY LEFT	96.957	DEG.	F	ALM
C	27	BATTERY RIGHT	102.88	DEG.	F	ALM
C	28	AIR IN SET	57.668	DEG.	F	ALM
C	29	FUEL TANK	78.668	DEG.	F	ALM
C	30	FUEL OUTLET	96.778	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 17:12:40

STOPPED SINGLE SCAN 18 NOV 87 17:12:40

BEGIN SCAN GROUP 1 18 NOV 87 17:13:24
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	500.40	DEG.	F	ALM
C	2	EXHAUST 2	529.70	DEG.	F	ALM
C	3	EXHAUST 3	521.42	DEG.	F	ALM
C	4	EXHAUST 4	526.89	DEG.	F	ALM
C	5	EXHAUST 5	535.89	DEG.	F	ALM
C	6	EXHAUST 6	527.35	DEG.	F	ALM
C	7	ENG. COOL. IN	161.61	DEG.	F	ALM
C	8	ENG. COOL. OUT	176.77	DEG.	F	ALM
C	9	OIL SUMP	204.29	DEG.	F	ALM
C	10	OIL GALLERY	204.41	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	69.609	DEG.	F	ALM
C	14	RAD. TOP LEFT	112.58	DEG.	F	ALM
C	15	RAD. BTM LEFT	109.04	DEG.	F	ALM
C	16	RAD. TOP RIGHT	112.36	DEG.	F	ALM
C	17	RAD. BTM RIGHT	110.50	DEG.	F	ALM
C	18	GEN. AIR IN	61.000	DEG.	F	ALM
C	19	GEN. AIR OUT	75.075	DEG.	F	ALM
C	20	GEN. FRAME TOP	70.161	DEG.	F	ALM
C	21	GEN. FRAME BTM	63.411	DEG.	F	ALM
C	22	GEN. EXCITER	69.046	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.427	DEG.	F	ALM
C	24	CONTROL PANEL	71.041	DEG.	F	ALM
C	25	RELAY AREA	64.955	DEG.	F	ALM
C	26	BATTERY LEFT	97.137	DEG.	F	ALM
C	27	BATTERY RIGHT	102.24	DEG.	F	ALM
C	28	AIR IN SET	57.430	DEG.	F	ALM
C	29	FUEL TANK	78.012	DEG.	F	ALM
C	30	FUEL OUTLET	95.126	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 17:13:34

STOPPED SINGLE SCAN 18 NOV 87 17:13:34

BEGIN SCAN GROUP 1 18 NOV 87 18:51:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	115.90	DEG.	F	ALM
C	2	EXHAUST 2	115.24	DEG.	F	ALM
C	3	EXHAUST 3	115.26	DEG.	F	ALM
C	4	EXHAUST 4	114.70	DEG.	F	ALM
C	5	EXHAUST 5	114.50	DEG.	F	ALM
C	6	EXHAUST 6	114.70	DEG.	F	ALM
C	7	ENG. COOL. IN	94.604	DEG.	F	ALM
C	8	ENG. COOL. OUT				OPEN TC
C	9	OIL SUMP	123.67	DEG.	F	ALM
C	10	OIL GALLERY	121.34	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	106.99	DEG.	F	ALM
C	14	RAD. TOP LEFT				OPEN TC
C	15	RAD. BTM LEFT				OPEN TC
C	16	RAD. TOP RIGHT				OPEN TC
C	17	RAD. BTM RIGHT	76.704	DEG.	F	ALM
C	18	GEN. AIR IN	58.070	DEG.	F	ALM
C	19	GEN. AIR OUT	75.905	DEG.	F	ALM
C	20	GEN. FRAME TOP	74.267	DEG.	F	ALM
C	21	GEN. FRAME BTM	64.419	DEG.	F	ALM
C	22	GEN. EXCITER	69.036	DEG.	F	ALM
C	23	GEN. VOLT. REG.	78.718	DEG.	F	ALM
C	24	CONTROL PANEL	70.070	DEG.	F	ALM
C	25	RELAY AREA	50.445	DEG.	F	ALM
C	26	BATTERY LEFT	83.600	DEG.	F	ALM
C	27	BATTERY RIGHT	83.405	DEG.	F	ALM
C	28	AIR IN SET	56.202	DEG.	F	ALM
C	29	FUEL TANK	69.629	DEG.	F	ALM
C	30	FUEL OUTLET	77.641	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 18:51:27

STOPPED SINGLE SCAN 18 NOV 87 18:51:27

BEGIN SCAN GROUP 1 18 NOV 87 18:52:29
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	115.09	DEG.	F	ALM
C	2	EXHAUST 2	114.45	DEG.	F	ALM
C	3	EXHAUST 3	114.40	DEG.	F	ALM
C	4	EXHAUST 4	114.00	DEG.	F	ALM
C	5	EXHAUST 5	113.74	DEG.	F	ALM
C	6	EXHAUST 6	114.10	DEG.	F	ALM
C	7	ENG. COOL. IN	94.021	DEG.	F	ALM
C	8	ENG. COOL. OUT	121.35	DEG.	F	ALM
C	9	OIL SUMP	122.99	DEG.	F	ALM
C	10	OIL GALLERY	120.61	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	105.94	DEG.	F	ALM
C	14	RAD. TOP LEFT	89.731	DEG.	F	ALM
C	15	RAD. BTM LEFT				OPEN TC
C	16	RAD. TOP RIGHT				OPEN TC
C	17	RAD. BTM RIGHT	76.146	DEG.	F	ALM
C	18	GEN. AIR IN	58.940	DEG.	F	ALM
C	19	GEN. AIR OUT	75.060	DEG.	F	ALM
C	20	GEN. FRAME TOP	74.190	DEG.	F	ALM
C	21	GEN. FRAME BTM	64.369	DEG.	F	ALM
C	22	GEN. EXCITER	69.040	DEG.	F	ALM
C	23	GEN. VOLT. REG.	78.465	DEG.	F	ALM
C	24	CONTROL PANEL	77.544	DEG.	F	ALM
C	25	RELAY AREA	58.367	DEG.	F	ALM
C	26	BATTERY LEFT	83.409	DEG.	F	ALM
C	27	BATTERY RIGHT	83.300	DEG.	F	ALM
C	28	AIR IN SET	57.976	DEG.	F	ALM
C	29	FUEL TANK	69.606	DEG.	F	ALM
C	30	FUEL OUTLET	76.870	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 18:52:29

STOPPED SINGLE SCAN 18 NOV 87 18:52:29

BEGIN SCAN GROUP 1 18 NOV 87 19:57:07
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	110.00	DEG.	F	ALM
C	2	EXHAUST 2	110.24	DEG.	F	ALM
C	3	EXHAUST 3	110.52	DEG.	F	ALM
C	4	EXHAUST 4	110.13	DEG.	F	ALM
C	5	EXHAUST 5	109.60	DEG.	F	ALM
C	6	EXHAUST 6	109.70	DEG.	F	ALM
C	7	ENG. COOL. IN	91.714	DEG.	F	ALM
C	8	ENG. COOL. OUT	110.32	DEG.	F	ALM
C	9	OIL SUMP	120.65	DEG.	F	ALM
C	10	OIL GALLERY	117.77	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	102.61	DEG.	F	ALM
C	14	RAD. TOP LEFT	89.632	DEG.	F	ALM
C	15	RAD. BTM LEFT	70.500	DEG.	F	ALM
C	16	RAD. TOP RIGHT	85.769	DEG.	F	ALM
C	17	RAD. BTM RIGHT	76.036	DEG.	F	ALM
C	18	GEN. AIR IN	59.506	DEG.	F	ALM
C	19	GEN. AIR OUT	68.319	DEG.	F	ALM
C	20	GEN. FRAME TOP	74.713	DEG.	F	ALM
C	21	GEN. FRAME BTM	64.506	DEG.	F	ALM
C	22	GEN. EXCITER	64.260	DEG.	F	ALM
C	23	GEN. VOLT. REG.	77.132	DEG.	F	ALM
C	24	CONTROL PANEL	75.431	DEG.	F	ALM
C	25	RELAY AREA	58.100	DEG.	F	ALM
C	26	BATTERY LEFT	82.207	DEG.	F	ALM
C	27	BATTERY RIGHT	84.354	DEG.	F	ALM
C	28	AIR IN SET	56.793	DEG.	F	ALM
C	29	FUEL TANK	69.376	DEG.	F	ALM
C	30	FUEL OUTLET	74.110	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:57:27

STOPPED SINGLE SCAN 18 NOV 87 19:57:27

BEGIN SCAN GROUP 1 18 NOV 87 18:59:15
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	271.36	DEG.	F	ALM
C	2	EXHAUST 2	289.88	DEG.	F	ALM
C	3	EXHAUST 3	287.34	DEG.	F	ALM
C	4	EXHAUST 4	297.64	DEG.	F	ALM
C	5	EXHAUST 5	281.88	DEG.	F	ALM
C	6	EXHAUST 6	278.69	DEG.	F	ALM
C	7	ENG. COOL. IN	91.359	DEG.	F	ALM
C	8	ENG. COOL. OUT	116.76	DEG.	F	ALM
C	9	OIL SUMP	121.84	DEG.	F	ALM
C	10	OIL GALLERY	122.86	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	86.587	DEG.	F	ALM
C	14	RAD. TOP LEFT	77.321	DEG.	F	ALM
C	15	RAD. BTM LEFT	76.289	DEG.	F	ALM
C	16	RAD. TOP RIGHT	78.527	DEG.	F	ALM
C	17	RAD. BTM RIGHT	76.857	DEG.	F	ALM
C	18	GEN. AIR IN	67.178	DEG.	F	ALM
C	19	GEN. AIR OUT	78.145	DEG.	F	ALM
C	20	GEN. FRAME TOP	74.598	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.868	DEG.	F	ALM
C	22	GEN. EXCITER	65.618	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.585	DEG.	F	ALM
C	24	CONTROL PANEL	74.544	DEG.	F	ALM
C	25	RELAY AREA	58.821	DEG.	F	ALM
C	26	BATTERY LEFT	81.766	DEG.	F	ALM
C	27	BATTERY RIGHT	84.861	DEG.	F	ALM
C	28	AIR IN SET	68.174	DEG.	F	ALM
C	29	FUEL TANK	69.499	DEG.	F	ALM
C	30	FUEL OUTLET	77.365	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 18:59:25

BEGIN SCAN GROUP 1 18 NOV 87 19:10:15
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	675.84	DEG.	F	ALM
C	2	EXHAUST 2	695.72	DEG.	F	ALM
C	3	EXHAUST 3	719.57	DEG.	F	ALM
C	4	EXHAUST 4	691.35	DEG.	F	ALM
C	5	EXHAUST 5	781.81	DEG.	F	ALM
C	6	EXHAUST 6	684.18	DEG.	F	ALM
C	7	ENG. COOL. IN	163.87	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.78	DEG.	F	ALM
C	9	OIL SUMP	179.75	DEG.	F	ALM
C	10	OIL GALLERY	181.19	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.382	DEG.	F	ALM
C	14	RAD. TOP LEFT	108.78	DEG.	F	ALM
C	15	RAD. BTM LEFT	95.788	DEG.	F	ALM
C	16	RAD. TOP RIGHT	99.979	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.869	DEG.	F	ALM
C	18	GEN. AIR IN	57.875	DEG.	F	ALM
C	19	GEN. AIR OUT	74.611	DEG.	F	ALM
C	20	GEN. FRAME TOP	78.764	DEG.	F	ALM
C	21	GEN. FRAME BTM	67.963	DEG.	F	ALM
C	22	GEN. EXCITER	67.832	DEG.	F	ALM
C	23	GEN. VOLT. REG.	76.325	DEG.	F	ALM
C	24	CONTROL PANEL	75.342	DEG.	F	ALM
C	25	RELAY AREA	57.871	DEG.	F	ALM
C	26	BATTERY LEFT	93.863	DEG.	F	ALM
C	27	BATTERY RIGHT	92.481	DEG.	F	ALM
C	28	AIR IN SET	54.667	DEG.	F	ALM
C	29	FUEL TANK	71.676	DEG.	F	ALM
C	30	FUEL OUTLET	93.264	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:10:25

BEGIN SCAN GROUP 1 18 NOV 87 19:19:07
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	672.12	DEG.	F	ALM
C	2	EXHAUST 2	691.66	DEG.	F	ALM
C	3	EXHAUST 3	715.82	DEG.	F	ALM
C	4	EXHAUST 4	684.71	DEG.	F	ALM
C	5	EXHAUST 5	699.54	DEG.	F	ALM
C	6	EXHAUST 6	679.69	DEG.	F	ALM
C	7	ENG. COOL. IN	164.28	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.78	DEG.	F	ALM
C	9	OIL SUMP	196.36	DEG.	F	ALM
C	10	OIL GALLERY	196.86	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.283	DEG.	F	ALM
C	14	RAD. TOP LEFT	108.74	DEG.	F	ALM
C	15	RAD. BTM LEFT	96.165	DEG.	F	ALM
C	16	RAD. TOP RIGHT	99.884	DEG.	F	ALM
C	17	RAD. BTM RIGHT	98.879	DEG.	F	ALM
C	18	GEN. AIR IN	58.674	DEG.	F	ALM
C	19	GEN. AIR OUT	76.323	DEG.	F	ALM
C	20	GEN. FRAME TOP	78.873	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.931	DEG.	F	ALM
C	22	GEN. EXCITER	67.165	DEG.	F	ALM
C	23	GEN. VOLT. REG.	75.816	DEG.	F	ALM
C	24	CONTROL PANEL	73.133	DEG.	F	ALM
C	25	RELAY AREA	56.738	DEG.	F	ALM
C	26	BATTERY LEFT	94.813	DEG.	F	ALM
C	27	BATTERY RIGHT	93.867	DEG.	F	ALM
C	28	AIR IN SET	56.998	DEG.	F	ALM
C	29	FUEL TANK	71.968	DEG.	F	ALM
C	30	FUEL OUTLET	92.612	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:19:12

BEGIN SCAN GROUP 1 18 NOV 87 19:29:47
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	668.55	DEG.	F	ALM
C	2	EXHAUST 2	689.14	DEG.	F	ALM
C	3	EXHAUST 3	715.38	DEG.	F	ALM
C	4	EXHAUST 4	686.14	DEG.	F	ALM
C	5	EXHAUST 5	697.13	DEG.	F	ALM
C	6	EXHAUST 6	681.97	DEG.	F	ALM
C	7	ENG. COOL. IN	164.81	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.33	DEG.	F	ALM
C	9	OIL SUMP	203.58	DEG.	F	ALM
C	10	OIL GALLERY	203.72	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.598	DEG.	F	ALM
C	14	RAD. TOP LEFT	108.16	DEG.	F	ALM
C	15	RAD. BTM LEFT	96.112	DEG.	F	ALM
C	16	RAD. TOP RIGHT	108.18	DEG.	F	ALM
C	17	RAD. BTM RIGHT	98.779	DEG.	F	ALM
C	18	GEN. AIR IN	59.865	DEG.	F	ALM
C	19	GEN. AIR OUT	77.374	DEG.	F	ALM
C	20	GEN. FRAME TOP	69.998	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.488	DEG.	F	ALM
C	22	GEN. EXCITER	67.153	DEG.	F	ALM
C	23	GEN. VOLT. REG.	73.698	DEG.	F	ALM
C	24	CONTROL PANEL	71.571	DEG.	F	ALM
C	25	RELAY AREA	56.489	DEG.	F	ALM
C	26	BATTERY LEFT	95.362	DEG.	F	ALM
C	27	BATTERY RIGHT	93.498	DEG.	F	ALM
C	28	AIR IN SET	58.188	DEG.	F	ALM
C	29	FUEL TANK	72.553	DEG.	F	ALM
C	30	FUEL OUTLET	92.728	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:29:55

BEGIN SCAN GROUP 1 18 NOV 87 19:39:14
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	669.88	DEG.	F	ALM
C	2	EXHAUST 2	691.71	DEG.	F	ALM
C	3	EXHAUST 3	716.43	DEG.	F	ALM
C	4	EXHAUST 4	685.78	DEG.	F	ALM
C	5	EXHAUST 5	695.56	DEG.	F	ALM
C	6	EXHAUST 6	678.28	DEG.	F	ALM
C	7	ENG. COOL. IN	164.62	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.89	DEG.	F	ALM
C	9	OIL SUMP	285.78	DEG.	F	ALM
C	10	OIL GALLERY	285.93	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	68.453	DEG.	F	ALM
C	14	RAD. TOP LEFT	99.885	DEG.	F	ALM
C	15	RAD. BTM LEFT	96.467	DEG.	F	ALM
C	16	RAD. TOP RIGHT	188.89	DEG.	F	ALM
C	17	RAD. BTM RIGHT	98.968	DEG.	F	ALM
C	18	GEN. AIR IN	58.888	DEG.	F	ALM
C	19	GEN. AIR OUT	77.921	DEG.	F	ALM
C	20	GEN. FRAME TOP	78.328	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.185	DEG.	F	ALM
C	22	GEN. EXCITER	67.386	DEG.	F	ALM
C	23	GEN. VOLT. REG.	72.681	DEG.	F	ALM
C	24	CONTROL PANEL	78.814	DEG.	F	ALM
C	25	RELAY AREA	56.881	DEG.	F	ALM
C	26	BATTERY LEFT	95.428	DEG.	F	ALM
C	27	BATTERY RIGHT	93.488	DEG.	F	ALM
C	28	AIR IN SET	56.724	DEG.	F	ALM
C	29	FUEL TANK	72.756	DEG.	F	ALM
C	30	FUEL OUTLET	92.885	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:39:24

BEGIN SCAN GROUP 1 18 NOV 87 19:42:16
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	688.38	DEG.	F	ALM
C	2	EXHAUST 2	625.37	DEG.	F	ALM
C	3	EXHAUST 3	644.14	DEG.	F	ALM
C	4	EXHAUST 4	628.93	DEG.	F	ALM
C	5	EXHAUST 5	638.38	DEG.	F	ALM
C	6	EXHAUST 6	615.87	DEG.	F	ALM
C	7	ENG. COOL. IN	155.98	DEG.	F	ALM
C	8	ENG. COOL. OUT	171.13	DEG.	F	ALM
C	9	OIL SUMP	285.16	DEG.	F	ALM
C	10	OIL GALLERY	285.32	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	67.277	DEG.	F	ALM
C	14	RAD. TOP LEFT	118.44	DEG.	F	ALM
C	15	RAD. BTM LEFT	106.14	DEG.	F	ALM
C	16	RAD. TOP RIGHT	188.18	DEG.	F	ALM
C	17	RAD. BTM RIGHT	189.25	DEG.	F	ALM
C	18	GEN. AIR IN	62.711	DEG.	F	ALM
C	19	GEN. AIR OUT	77.912	DEG.	F	ALM
C	20	GEN. FRAME TOP	78.881	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.885	DEG.	F	ALM
C	22	GEN. EXCITER	67.878	DEG.	F	ALM
C	23	GEN. VOLT. REG.	72.416	DEG.	F	ALM
C	24	CONTROL PANEL	78.638	DEG.	F	ALM
C	25	RELAY AREA	56.485	DEG.	F	ALM
C	26	BATTERY LEFT	95.551	DEG.	F	ALM
C	27	BATTERY RIGHT	93.457	DEG.	F	ALM
C	28	AIR IN SET	55.399	DEG.	F	ALM
C	29	FUEL TANK	72.882	DEG.	F	ALM
C	30	FUEL OUTLET	93.838	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:42:28

BEGIN SCAN GROUP 1 18 NOV 87 19:48:58
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	484.89	DEG.	F	ALM
C	2	EXHAUST 2	586.23	DEG.	F	ALM
C	3	EXHAUST 3	586.88	DEG.	F	ALM
C	4	EXHAUST 4	515.28	DEG.	F	ALM
C	5	EXHAUST 5	518.63	DEG.	F	ALM
C	6	EXHAUST 6	518.58	DEG.	F	ALM
C	7	ENG. COOL. IN	164.38	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.58	DEG.	F	ALM
C	9	OIL SUMP	285.18	DEG.	F	ALM
C	10	OIL GALLERY	285.88	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	68.368	DEG.	F	ALM
C	14	RAD. TOP LEFT	97.859	DEG.	F	ALM
C	15	RAD. BTM LEFT	94.434	DEG.	F	ALM
C	16	RAD. TOP RIGHT	99.478	DEG.	F	ALM
C	17	RAD. BTM RIGHT	98.139	DEG.	F	ALM
C	18	GEN. AIR IN	56.999	DEG.	F	ALM
C	19	GEN. AIR OUT	76.541	DEG.	F	ALM
C	20	GEN. FRAME TOP	78.489	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.166	DEG.	F	ALM
C	22	GEN. EXCITER	66.952	DEG.	F	ALM
C	23	GEN. VOLT. REG.	72.687	DEG.	F	ALM
C	24	CONTROL PANEL	78.746	DEG.	F	ALM
C	25	RELAY AREA	56.785	DEG.	F	ALM
C	26	BATTERY LEFT	95.518	DEG.	F	ALM
C	27	BATTERY RIGHT	93.398	DEG.	F	ALM
C	28	AIR IN SET	54.963	DEG.	F	ALM
C	29	FUEL TANK	72.867	DEG.	F	ALM
C	30	FUEL OUTLET	92.457	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:48:59

BEGIN SCAN GROUP 1 18 NOV 87 19:43:36
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	462.36	DEG.	F	ALM
C	2	EXHAUST 2	481.83	DEG.	F	ALM
C	3	EXHAUST 3	473.65	DEG.	F	ALM
C	4	EXHAUST 4	498.91	DEG.	F	ALM
C	5	EXHAUST 5	494.28	DEG.	F	ALM
C	6	EXHAUST 6	498.63	DEG.	F	ALM
C	7	ENG. COOL. IN	165.68	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.91	DEG.	F	ALM
C	9	OIL SUMP	285.28	DEG.	F	ALM
C	10	OIL GALLERY	285.18	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	69.481	DEG.	F	ALM
C	14	RAD. TOP LEFT	113.58	DEG.	F	ALM
C	15	RAD. BTM LEFT	189.12	DEG.	F	ALM
C	16	RAD. TOP RIGHT	114.15	DEG.	F	ALM
C	17	RAD. BTM RIGHT	111.75	DEG.	F	ALM
C	18	GEN. AIR IN	64.139	DEG.	F	ALM
C	19	GEN. AIR OUT	78.469	DEG.	F	ALM
C	20	GEN. FRAME TOP	78.975	DEG.	F	ALM
C	21	GEN. FRAME BTM	69.132	DEG.	F	ALM
C	22	GEN. EXCITER	68.795	DEG.	F	ALM
C	23	GEN. VOLT. REG.	72.375	DEG.	F	ALM
C	24	CONTROL PANEL	78.481	DEG.	F	ALM
C	25	RELAY AREA	56.358	DEG.	F	ALM
C	26	BATTERY LEFT	95.638	DEG.	F	ALM
C	27	BATTERY RIGHT	93.565	DEG.	F	ALM
C	28	AIR IN SET	53.965	DEG.	F	ALM
C	29	FUEL TANK	73.821	DEG.	F	ALM
C	30	FUEL OUTLET	93.398	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:43:40

STOPPED SINGLE SCAN 18 NOV 87 19:43:40

BEGIN SCAN GROUP 1 18 NOV 87 19:44:36
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	554.83	DEG.	F	ALM
C	2	EXHAUST 2	572.17	DEG.	F	ALM
C	3	EXHAUST 3	593.17	DEG.	F	ALM
C	4	EXHAUST 4	579.25	DEG.	F	ALM
C	5	EXHAUST 5	594.87	DEG.	F	ALM
C	6	EXHAUST 6	569.43	DEG.	F	ALM
C	7	ENG. COOL. IN	159.28	DEG.	F	ALM
C	8	ENG. COOL. OUT	174.81	DEG.	F	ALM
C	9	OIL SUMP	284.78	DEG.	F	ALM
C	10	OIL GALLERY	284.79	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	69.184	DEG.	F	ALM
C	14	RAD. TOP LEFT	182.82	DEG.	F	ALM
C	15	RAD. BTM LEFT	98.535	DEG.	F	ALM
C	16	RAD. TOP RIGHT	184.28	DEG.	F	ALM
C	17	RAD. BTM RIGHT	181.47	DEG.	F	ALM
C	18	GEN. AIR IN	59.124	DEG.	F	ALM
C	19	GEN. AIR OUT	76.483	DEG.	F	ALM
C	20	GEN. FRAME TOP	71.824	DEG.	F	ALM
C	21	GEN. FRAME BTM	68.354	DEG.	F	ALM
C	22	GEN. EXCITER	68.838	DEG.	F	ALM
C	23	GEN. VOLT. REG.	72.375	DEG.	F	ALM
C	24	CONTROL PANEL	78.481	DEG.	F	ALM
C	25	RELAY AREA	56.545	DEG.	F	ALM
C	26	BATTERY LEFT	96.166	DEG.	F	ALM
C	27	BATTERY RIGHT	93.692	DEG.	F	ALM
C	28	AIR IN SET	56.358	DEG.	F	ALM
C	29	FUEL TANK	73.534	DEG.	F	ALM
C	30	FUEL OUTLET	94.682	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:44:46

STOPPED SINGLE SCAN 18 NOV 87 19:44:46

BEGIN SCAN GROUP 1 18 NOV 87 19:45:49
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	455.54	DEG.	F	ALM
C	2	EXHAUST 2	476.52	DEG.	F	ALM
C	3	EXHAUST 3	469.37	DEG.	F	ALM
C	4	EXHAUST 4	487.78	DEG.	F	ALM
C	5	EXHAUST 5	498.92	DEG.	F	ALM
C	6	EXHAUST 6	488.81	DEG.	F	ALM
C	7	ENG. COOL. IN	162.84	DEG.	F	ALM
C	8	ENG. COOL. OUT	177.91	DEG.	F	ALM
C	9	OIL SUMP	284.64	DEG.	F	ALM
C	10	OIL GALLERY	284.69	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	69.182	DEG.	F	ALM
C	14	RAD. TOP LEFT	188.63	DEG.	F	ALM
C	15	RAD. BTM LEFT	183.87	DEG.	F	ALM
C	16	RAD. TOP RIGHT	189.18	DEG.	F	ALM
C	17	RAD. BTM RIGHT	187.48	DEG.	F	ALM
C	18	GEN. AIR IN	59.569	DEG.	F	ALM
C	19	GEN. AIR OUT	77.275	DEG.	F	ALM
C	20	GEN. FRAME TOP	71.643	DEG.	F	ALM
C	21	GEN. FRAME BTM	69.848	DEG.	F	ALM
C	22	GEN. EXCITER	68.367	DEG.	F	ALM
C	23	GEN. VOLT. REG.	72.313	DEG.	F	ALM
C	24	CONTROL PANEL	78.424	DEG.	F	ALM
C	25	RELAY AREA	56.454	DEG.	F	ALM
C	26	BATTERY LEFT	96.459	DEG.	F	ALM
C	27	BATTERY RIGHT	93.859	DEG.	F	ALM
C	28	AIR IN SET	55.216	DEG.	F	ALM
C	29	FUEL TANK	73.759	DEG.	F	ALM
C	30	FUEL OUTLET	94.922	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 19:45:59

STOPPED SINGLE SCAN 18 NOV 87 19:45:59

BEGIN SCAN GROUP 1 18 NOV 87 19:58:0
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	639.81	DEG.	F	AL
C	2	EXHAUST 2	664.82	DEG.	F	AL
C	3	EXHAUST 3	687.11	DEG.	F	AL
C	4	EXHAUST 4	656.24	DEG.	F	AL
C	5	EXHAUST 5	668.32	DEG.	F	AL
C	6	EXHAUST 6	652.98	DEG.	F	AL
C	7	ENG. COOL. IN	164.48	DEG.	F	AL
C	8	ENG. COOL. OUT	188.97	DEG.	F	AL
C	9	OIL SUMP	284.74	DEG.	F	AL
C	10	OIL GALLERY	284.72	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.612	DEG.	F	AL
C	14	RAD. TOP LEFT	98.415	DEG.	F	AL
C	15	RAD. BTM LEFT	94.183	DEG.	F	AL
C	16	RAD. TOP RIGHT	188.12	DEG.	F	AL
C	17	RAD. BTM RIGHT	97.382	DEG.	F	AL
C	18	GEN. AIR IN	54.962	DEG.	F	AL
C	19	GEN. AIR OUT	73.516	DEG.	F	AL
C	20	GEN. FRAME TOP	78.131	DEG.	F	AL
C	21	GEN. FRAME BTM	67.632	DEG.	F	AL
C	22	GEN. EXCITER	65.955	DEG.	F	AL
C	23	GEN. VOLT. REG.	71.993	DEG.	F	AL
C	24	CONTROL PANEL	78.152	DEG.	F	AL
C	25	RELAY AREA	55.764	DEG.	F	AL
C	26	BATTERY LEFT	97.388	DEG.	F	AL
C	27	BATTERY RIGHT	94.356	DEG.	F	AL
C	28	AIR IN SET	52.887	DEG.	F	AL
C	29	FUEL TANK	74.862	DEG.	F	AL
C	30	FUEL OUTLET	96.327	DEG.	F	AL

END SCAN GROUP 1 18 NOV 87 19:58:12

STOPPED SINGLE SCAN 18 NOV 87 19:58:12

BEGIN SCAN GROUP 1 18 NOV 87 19:59:11
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	644.72	DEG.	F	AL
C	2	EXHAUST 2	673.87	DEG.	F	AL
C	3	EXHAUST 3	696.85	DEG.	F	AL
C	4	EXHAUST 4	667.32	DEG.	F	AL
C	5	EXHAUST 5	677.67	DEG.	F	AL
C	6	EXHAUST 6	663.19	DEG.	F	AL
C	7	ENG. COOL. IN	162.62	DEG.	F	AL
C	8	ENG. COOL. OUT	179.42	DEG.	F	AL
C	9	OIL SUMP	285.53	DEG.	F	AL
C	10	OIL GALLERY	285.71	DEG.	F	AL
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	65.987	DEG.	F	AL
C	14	RAD. TOP LEFT	98.713	DEG.	F	AL
C	15	RAD. BTM LEFT	93.988	DEG.	F	AL
C	16	RAD. TOP RIGHT	98.587	DEG.	F	AL
C	17	RAD. BTM RIGHT	96.753	DEG.	F	AL
C	18	GEN. AIR IN	55.995	DEG.	F	AL
C	19	GEN. AIR OUT	73.152	DEG.	F	AL
C	20	GEN. FRAME TOP	68.222	DEG.	F	AL
C	21	GEN. FRAME BTM	65.543	DEG.	F	AL
C	22	GEN. EXCITER	65.647	DEG.	F	AL
C	23	GEN. VOLT. REG.	71.338	DEG.	F	AL
C	24	CONTROL PANEL	69.627	DEG.	F	AL
C	25	RELAY AREA	55.832	DEG.	F	AL
C	26	BATTERY LEFT	96.645	DEG.	F	AL
C	27	BATTERY RIGHT	93.919	DEG.	F	AL
C	28	AIR IN SET	54.172	DEG.	F	AL
C	29	FUEL TANK	70.885	DEG.	F	AL
C	30	FUEL OUTLET	93.443	DEG.	F	AL

END SCAN GROUP 1 18 NOV 87 19:59:20

STOPPED SINGLE SCAN 18 NOV 87 19:59:20

BEGIN SCAN GROUP 1 18 NOV 87 20:03:35
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	643.41	DEG.	F	ALM
C	2	EXHAUST 2	672.44	DEG.	F	ALM
C	3	EXHAUST 3	694.57	DEG.	F	ALM
C	4	EXHAUST 4	666.96	DEG.	F	ALM
C	5	EXHAUST 5	676.61	DEG.	F	ALM
C	6	EXHAUST 6	662.66	DEG.	F	ALM
C	7	ENG. COOL. IN	162.72	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.55	DEG.	F	ALM
C	9	OIL SUMP	205.61	DEG.	F	ALM
C	10	OIL GALLERY	205.83	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.361	DEG.	F	ALM
C	14	RAD. TOP LEFT	99.325	DEG.	F	ALM
C	15	RAD. BTM LEFT	94.937	DEG.	F	ALM
C	16	RAD. TOP RIGHT	99.152	DEG.	F	ALM
C	17	RAD. BTM RIGHT	97.346	DEG.	F	ALM
C	18	GEN. AIR IN	57.636	DEG.	F	ALM
C	19	GEN. AIR OUT	72.959	DEG.	F	ALM
C	20	GEN. FRAME TOP	67.655	DEG.	F	ALM
C	21	GEN. FRAME BTM	64.643	DEG.	F	ALM
C	22	GEN. EXCITER	66.537	DEG.	F	ALM
C	23	GEN. VOLT. REG.	78.828	DEG.	F	ALM
C	24	CONTROL PANEL	69.218	DEG.	F	ALM
C	25	RELAY AREA	55.998	DEG.	F	ALM
C	26	BATTERY LEFT	96.437	DEG.	F	ALM
C	27	BATTERY RIGHT	93.623	DEG.	F	ALM
C	28	AIR IN SET	55.978	DEG.	F	ALM
C	29	FUEL TANK	74.243	DEG.	F	ALM
C	30	FUEL OUTLET	93.548	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 20:03:45

STOPPED SINGLE SCAN 18 NOV 87 20:03:45

BEGIN SCAN GROUP 1 18 NOV 87 20:22:00
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	441.67	DEG.	F	ALM
C	2	EXHAUST 2	464.78	DEG.	F	ALM
C	3	EXHAUST 3	465.81	DEG.	F	ALM
C	4	EXHAUST 4	477.87	DEG.	F	ALM
C	5	EXHAUST 5	478.28	DEG.	F	ALM
C	6	EXHAUST 6	488.52	DEG.	F	ALM
C	7	ENG. COOL. IN	162.28	DEG.	F	ALM
C	8	ENG. COOL. OUT	182.83	DEG.	F	ALM
C	9	OIL SUMP	205.81	DEG.	F	ALM
C	10	OIL GALLERY	205.77	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.116	DEG.	F	ALM
C	14	RAD. TOP LEFT	98.825	DEG.	F	ALM
C	15	RAD. BTM LEFT	93.764	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.538	DEG.	F	ALM
C	17	RAD. BTM RIGHT	96.438	DEG.	F	ALM
C	18	GEN. AIR IN	56.888	DEG.	F	ALM
C	19	GEN. AIR OUT	71.722	DEG.	F	ALM
C	20	GEN. FRAME TOP	66.617	DEG.	F	ALM
C	21	GEN. FRAME BTM	63.462	DEG.	F	ALM
C	22	GEN. EXCITER	65.888	DEG.	F	ALM
C	23	GEN. VOLT. REG.	78.888	DEG.	F	ALM
C	24	CONTROL PANEL	68.569	DEG.	F	ALM
C	25	RELAY AREA	55.526	DEG.	F	ALM
C	26	BATTERY LEFT	96.686	DEG.	F	ALM
C	27	BATTERY RIGHT	93.478	DEG.	F	ALM
C	28	AIR IN SET	54.546	DEG.	F	ALM
C	29	FUEL TANK	74.527	DEG.	F	ALM
C	30	FUEL OUTLET	91.124	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 20:22:16

STOPPED SINGLE SCAN 18 NOV 87 20:22:16

BEGIN SCAN GROUP 1 18 NOV 87 20:19:54
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	644.41	DEG.	F	ALM
C	2	EXHAUST 2	672.44	DEG.	F	ALM
C	3	EXHAUST 3	694.77	DEG.	F	ALM
C	4	EXHAUST 4	665.16	DEG.	F	ALM
C	5	EXHAUST 5	677.16	DEG.	F	ALM
C	6	EXHAUST 6	662.64	DEG.	F	ALM
C	7	ENG. COOL. IN	162.58	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.53	DEG.	F	ALM
C	9	OIL SUMP	205.61	DEG.	F	ALM
C	10	OIL GALLERY	205.81	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	66.279	DEG.	F	ALM
C	14	RAD. TOP LEFT	98.772	DEG.	F	ALM
C	15	RAD. BTM LEFT	94.415	DEG.	F	ALM
C	16	RAD. TOP RIGHT	98.646	DEG.	F	ALM
C	17	RAD. BTM RIGHT	96.659	DEG.	F	ALM
C	18	GEN. AIR IN	56.879	DEG.	F	ALM
C	19	GEN. AIR OUT	71.971	DEG.	F	ALM
C	20	GEN. FRAME TOP	66.942	DEG.	F	ALM
C	21	GEN. FRAME BTM	64.388	DEG.	F	ALM
C	22	GEN. EXCITER	65.325	DEG.	F	ALM
C	23	GEN. VOLT. REG.	78.165	DEG.	F	ALM
C	24	CONTROL PANEL	68.735	DEG.	F	ALM
C	25	RELAY AREA	55.716	DEG.	F	ALM
C	26	BATTERY LEFT	96.561	DEG.	F	ALM
C	27	BATTERY RIGHT	93.459	DEG.	F	ALM
C	28	AIR IN SET	54.399	DEG.	F	ALM
C	29	FUEL TANK	74.562	DEG.	F	ALM
C	30	FUEL OUTLET	92.238	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 20:19:04

STOPPED SINGLE SCAN 18 NOV 87 20:19:04

BEGIN SCAN GROUP 1 18 NOV 87 20:22:50
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	544.78	DEG.	F	ALM
C	2	EXHAUST 2	567.77	DEG.	F	ALM
C	3	EXHAUST 3	593.43	DEG.	F	ALM
C	4	EXHAUST 4	576.81	DEG.	F	ALM
C	5	EXHAUST 5	591.89	DEG.	F	ALM
C	6	EXHAUST 6	578.74	DEG.	F	ALM
C	7	ENG. COOL. IN	157.27	DEG.	F	ALM
C	8	ENG. COOL. OUT	171.54	DEG.	F	ALM
C	9	OIL SUMP	205.22	DEG.	F	ALM
C	10	OIL GALLERY	205.29	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	65.943	DEG.	F	ALM
C	14	RAD. TOP LEFT	188.41	DEG.	F	ALM
C	15	RAD. BTM LEFT	96.238	DEG.	F	ALM
C	16	RAD. TOP RIGHT	188.28	DEG.	F	ALM
C	17	RAD. BTM RIGHT	99.249	DEG.	F	ALM
C	18	GEN. AIR IN	57.981	DEG.	F	ALM
C	19	GEN. AIR OUT	72.899	DEG.	F	ALM
C	20	GEN. FRAME TOP	66.595	DEG.	F	ALM
C	21	GEN. FRAME BTM	63.823	DEG.	F	ALM
C	22	GEN. EXCITER	65.552	DEG.	F	ALM
C	23	GEN. VOLT. REG.	69.945	DEG.	F	ALM
C	24	CONTROL PANEL	68.596	DEG.	F	ALM
C	25	RELAY AREA	55.526	DEG.	F	ALM
C	26	BATTERY LEFT	96.527	DEG.	F	ALM
C	27	BATTERY RIGHT	93.351	DEG.	F	ALM
C	28	AIR IN SET	55.127	DEG.	F	ALM
C	29	FUEL TANK	74.452	DEG.	F	ALM
C	30	FUEL OUTLET	91.326	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 20:23:00

STOPPED SINGLE SCAN 18 NOV 87 20:23:00

BEGIN SCAN GROUP 1 18 NOV 87 20:24:05
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	436.25	DEG.	F	ALM
C	2	EXHAUST 2	459.45	DEG.	F	ALM
C	3	EXHAUST 3	452.20	DEG.	F	ALM
C	4	EXHAUST 4	469.62	DEG.	F	ALM
C	5	EXHAUST 5	473.67	DEG.	F	ALM
C	6	EXHAUST 6	472.27	DEG.	F	ALM
C	7	ENG. COOL. IN	162.66	DEG.	F	ALM
C	8	ENG. COOL. OUT	177.18	DEG.	F	ALM
C	9	OIL SUMP	285.88	DEG.	F	ALM
C	10	OIL GALLERY	284.92	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	67.363	DEG.	F	ALM
C	14	RAD. TOP LEFT	112.12	DEG.	F	ALM
C	15	RAD. BTM LEFT	106.79	DEG.	F	ALM
C	16	RAD. TOP RIGHT	111.26	DEG.	F	ALM
C	17	RAD. BTM RIGHT	110.87	DEG.	F	ALM
C	18	GEN. AIR IN	62.271	DEG.	F	ALM
C	19	GEN. AIR OUT	73.200	DEG.	F	ALM
C	20	GEN. FRAME TOP	67.114	DEG.	F	ALM
C	21	GEN. FRAME BTM	65.967	DEG.	F	ALM
C	22	GEN. EXCITER	66.617	DEG.	F	ALM
C	23	GEN. VOLT. REG.	69.828	DEG.	F	ALM
C	24	CONTROL PANEL	68.465	DEG.	F	ALM
C	25	RELAY AREA	55.581	DEG.	F	ALM
C	26	BATTERY LEFT	96.654	DEG.	F	ALM
C	27	BATTERY RIGHT	93.351	DEG.	F	ALM
C	28	AIR IN SET	53.255	DEG.	F	ALM
C	29	FUEL TANK	75.252	DEG.	F	ALM
C	30	FUEL OUTLET	92.365	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 20:24:15

STOPPED SINGLE SCAN 18 NOV 87 20:24:15

BEGIN SCAN GROUP 1 18 NOV 87 20:24:50
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	551.83	DEG.	F	ALM
C	2	EXHAUST 2	575.43	DEG.	F	ALM
C	3	EXHAUST 3	597.78	DEG.	F	ALM
C	4	EXHAUST 4	588.68	DEG.	F	ALM
C	5	EXHAUST 5	596.69	DEG.	F	ALM
C	6	EXHAUST 6	573.43	DEG.	F	ALM
C	7	ENG. COOL. IN	161.36	DEG.	F	ALM
C	8	ENG. COOL. OUT	176.12	DEG.	F	ALM
C	9	OIL SUMP	284.62	DEG.	F	ALM
C	10	OIL GALLERY	284.62	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	67.612	DEG.	F	ALM
C	14	RAD. TOP LEFT	109.44	DEG.	F	ALM
C	15	RAD. BTM LEFT	104.66	DEG.	F	ALM
C	16	RAD. TOP RIGHT	110.84	DEG.	F	ALM
C	17	RAD. BTM RIGHT	108.87	DEG.	F	ALM
C	18	GEN. AIR IN	68.328	DEG.	F	ALM
C	19	GEN. AIR OUT	72.578	DEG.	F	ALM
C	20	GEN. FRAME TOP	67.272	DEG.	F	ALM
C	21	GEN. FRAME BTM	66.386	DEG.	F	ALM
C	22	GEN. EXCITER	66.595	DEG.	F	ALM
C	23	GEN. VOLT. REG.	69.793	DEG.	F	ALM
C	24	CONTROL PANEL	69.416	DEG.	F	ALM
C	25	RELAY AREA	55.476	DEG.	F	ALM
C	26	BATTERY LEFT	96.888	DEG.	F	ALM
C	27	BATTERY RIGHT	93.499	DEG.	F	ALM
C	28	AIR IN SET	53.887	DEG.	F	ALM
C	29	FUEL TANK	74.868	DEG.	F	ALM
C	30	FUEL OUTLET	93.980	DEG.	F	ALM

END SCAN GROUP 1 18 NOV 87 20:24:59

STOPPED SINGLE SCAN 18 NOV 87 20:24:59

BEGIN SCAN GROUP 1 18 NOV 87 20:25:41
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	440.75	DEG.	F	AL
C	2	EXHAUST 2	464.91	DEG.	F	AL
C	3	EXHAUST 3	456.32	DEG.	F	AL
C	4	EXHAUST 4	471.68	DEG.	F	AL
C	5	EXHAUST 5	476.89	DEG.	F	AL
C	6	EXHAUST 6	473.84	DEG.	F	AL
C	7	ENG. COOL. IN	162.86	DEG.	F	AL
C	8	ENG. COOL. OUT	178.83	DEG.	F	AL
C	9	OIL SUMP	284.73	DEG.	F	AL
C	10	OIL GALLERY	284.57	DEG.	F	AL
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	67.893	DEG.	F	AL
C	14	RAD. TOP LEFT	110.21	DEG.	F	AL
C	15	RAD. BTM LEFT	105.28	DEG.	F	AL
C	16	RAD. TOP RIGHT	110.75	DEG.	F	AL
C	17	RAD. BTM RIGHT	108.76	DEG.	F	AL
C	18	GEN. AIR IN	61.898	DEG.	F	AL
C	19	GEN. AIR OUT	72.898	DEG.	F	AL
C	20	GEN. FRAME TOP	67.424	DEG.	F	AL
C	21	GEN. FRAME BTM	66.568	DEG.	F	AL
C	22	GEN. EXCITER	66.883	DEG.	F	AL
C	23	GEN. VOLT. REG.	69.739	DEG.	F	AL
C	24	CONTROL PANEL	68.362	DEG.	F	AL
C	25	RELAY AREA	55.393	DEG.	F	AL
C	26	BATTERY LEFT	97.181	DEG.	F	AL
C	27	BATTERY RIGHT	93.626	DEG.	F	AL
C	28	AIR IN SET	54.336	DEG.	F	AL
C	29	FUEL TANK	75.225	DEG.	F	AL
C	30	FUEL OUTLET	92.137	DEG.	F	AL

END SCAN GROUP 1 18 NOV 87 20:25:51

STOPPED SINGLE SCAN 18 NOV 87 20:25:51

TEST DATA

ITEM JOKW 60Hz

GENERATOR SET

AMPLIFIER

MPGR. LIBBY WELDON

MODEL NO. MEO 005A

SERIAL NO. R253774

NTS

National
Technical
SystemsScientific
Services
GroupTesting Division
P.O. Box 38
Haltwood, Virginia 22471
Tel: 703 752 5300

HIGH TEMP NO. 13.2(H)(8)

REF. NO. MIL-STD 705; 608.2

SHEET 2 OF 2

DATE 10 NOV 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER CV KM GC

FREQUENCY AND VOLTAGE STABILITY TEST

(LONG TERM)

INST TIME	STEP NO.	LOAD STEP	E60280 VOLTAGE			E60400 AMPERES X 40			E62300 KILOWATTS X 40						E62420 POWER		E62410 FREQ.		E61890 EXCITER FIELD		AMB. TEMP. °F	PRES IN/OUT IN/H2O IN/21.5
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW	FACTOR PF	HZ	VOLTS VDC	AMPS DCA							
1253		N/L	122	121	122											61.6	4.0	1.5		123	14.7/21.5	
1253		PERFORM SHORT TERM STABILITY	122	121	122	NO	NO	NO								61.6	4.0	1.5		122	14.7/21.5	
1254		N/L	122	121	122											61.6	3.9	1.5		123	14.8/21.1	
1255		START LONG TERM STABILITY	122	121	122											61.5	4.0	1.5		124	14.7/21.6	
1325		N/L	122	121	122											61.5	3.9	1.5		124	14.7/21.9	
1355		N/L	122.1	121.1	122.1											61.5	3.9	1.5		124	14.6/21.2	
1405		N/L	122.1	121.1	122.1											61.5	4.0	1.5		124	14.7/21.7	
1455		N/L	122.1	121.1	122.1											61.5	3.8	1.5		123	14.6/21.3	
1505		N/L	122.1	121.1	122.1											61.5	3.9	1.5		124	14.7/21.5	
1625		N/L	122.1	121.1	122.1											61.5	3.9	1.5		124	14.7/21.5	
1655		END OF LONG TERM STABILITY	120	121.5	120.5	2.56	2.56	2.56	.25	.25	.25				.795	59.4	4.1	3.5		124	14.7/21.7	
1655		N/L	120	121	122											61.6	4.1	1.5		124	14.7/21.7	
1700		N/L	120	121.5	121											59.4	2.2	3.6		124	14.7/21.7	
		N/L	122.5	121	122											61.6	4.0	1.5		124	14.7/21.8	
		N/L	120	121.5	120.5	2.56	2.56	2.56	.25	.25	.25				.795	59.4	4.1	3.6		124	14.7/21.8	
1205		END OF TEST																				
1215		SHORT DOWN UNIT																				
1206																						

TEST FAILURE - SEE COMPUTATION SHEET

NOTES:

TEST DATA

ITEM 30 KW 60 Hz
GENERATOR SET
MODIFIED
 HFCR. LIBBY WELCORING
 MODEL NO. MEP 005A
 SERIAL NO. R253274

National Technical Systems
 Scientific Services Group
 Testing Division
 P.O. Box 38
 Hailwood, Virginia 22471
 tel: 703 752 5300
 FREQUENCY AND VOLTAGE STABILITY
 (Long Term) Method 608.2

REF. NO. NIL-STD-705
 SHEET 1 OF 1
 DATE 11 JAN 1988
 JOB NO. 855-2140
 PROJ. ENGR.
 RECORDER/OBSERVER GC/Km.

LOAD STEP	MAXIMUM EXCURSION			CONSTANT LOAD		REG. TIME	REGENERATION		MAXIMUM EXCURSION		CONSTANT LOAD	REG. TIME	VOLTAGE	
	OVERSHOOT Hz	UNDERSHOOT Hz	TIME SEC	BANDWIDTH Hz	TIME SEC		FREQ. Hz	VOLT V	INFRS VOLT	DOT VOLT	TIME SEC		WATT WATT	WATT WATT
1-2	1.23	1.35	2.26	.05	.09	.56	3.5	1.33	4.11	3.52	3.18	.23	.17	.15
2-3	1.23	1.35	2.26	.09	.15	.38	3.66	1.25	3.47	3.30	2.75	.23	.17	.15
3-4	1.23	1.38	2.22	.10	.17	.20	3.66	.83	3.64	3.04		.23	.26	.22
4-5	1.01	1.29	2.14	.09	.15	.55	3.5	1.25	3.47	2.89		.23	.17	.15
5-6	1.22	1.22	2.03	.09	.15	.55	3.66	1.25	3.47	2.89		.23	.17	.15
6-7	1.22	1.22	2.03	.16	.26								.17	.15

FREQUENCY REGULATION EXCEEDED 2%

NOTES:

FREQUENCY/VOLTAGE STABILITY TEST 608.2 LONG TERM

BEGIN SCAN GROUP 1 10 NOV 87 06:45:27
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	755.96	DEG.	F	ALM
C	2	EXHAUST 2	778.76	DEG.	F	ALM
C	3	EXHAUST 3	800.00	DEG.	F	ALM
C	4	EXHAUST 4	779.66	DEG.	F	ALM
C	5	EXHAUST 5	771.96	DEG.	F	ALM
C	6	EXHAUST 6	762.01	DEG.	F	ALM
C	7	ENG. COOL. IN	189.33	DEG.	F	ALM
C	8	ENG. COOL. OUT	197.17	DEG.	F	ALM
C	9	OIL SUMP	192.01	DEG.	F	ALM
C	10	OIL GALLERY	194.42	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.94	DEG.	F	ALM
C	14	RAD. TOP LEFT	141.29	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.20	DEG.	F	ALM
C	16	RAD. TOP RIGHT	132.92	DEG.	F	ALM
C	17	RAD. BTM RIGHT	136.93	DEG.	F	ALM
C	18	GEN. AIR IN	121.63	DEG.	F	ALM
C	19	GEN. AIR OUT	127.06	DEG.	F	ALM
C	20	GEN. FRAME TOP	117.93	DEG.	F	ALM
C	21	GEN. FRAME BTM	113.93	DEG.	F	ALM
C	22	GEN. EXCITER	126.23	DEG.	F	ALM
C	23	GEN. VOLT. REG.	108.46	DEG.	F	ALM
C	24	CONTROL PANEL	114.50	DEG.	F	ALM
C	25	RELAY AREA	122.18	DEG.	F	ALM
C	26	BATTERY LEFT	101.47	DEG.	F	ALM
C	27	BATTERY RIGHT	103.72	DEG.	F	ALM
C	28	AIR IN SET	123.55	DEG.	F	ALM
C	29	FUEL TANK	89.944	DEG.	F	ALM
C	30	FUEL OUTLET	117.10	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 06:45:38

STOPPED SINGLE SCAN 10 NOV 87 06:45:38

BEGIN SCAN GROUP 1 10 NOV 87 06:55:07
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	760.95	DEG.	F	ALM
C	2	EXHAUST 2	782.60	DEG.	F	ALM
C	3	EXHAUST 3	810.84	DEG.	F	ALM
C	4	EXHAUST 4	785.83	DEG.	F	ALM
C	5	EXHAUST 5	773.58	DEG.	F	ALM
C	6	EXHAUST 6	766.13	DEG.	F	ALM
C	7	ENG. COOL. IN	196.95	DEG.	F	ALM
C	8	ENG. COOL. OUT	204.00	DEG.	F	ALM
C	9	OIL SUMP	215.54	DEG.	F	ALM
C	10	OIL GALLERY	216.01	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.49	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.21	DEG.	F	ALM
C	15	RAD. BTM LEFT	140.09	DEG.	F	ALM
C	16	RAD. TOP RIGHT	139.42	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.07	DEG.	F	ALM
C	18	GEN. AIR IN	123.96	DEG.	F	ALM
C	19	GEN. AIR OUT	134.61	DEG.	F	ALM
C	20	GEN. FRAME TOP	125.07	DEG.	F	ALM
C	21	GEN. FRAME BTM	121.26	DEG.	F	ALM
C	22	GEN. EXCITER	130.19	DEG.	F	ALM
C	23	GEN. VOLT. REG.	116.19	DEG.	F	ALM
C	24	CONTROL PANEL	123.73	DEG.	F	ALM
C	25	RELAY AREA	126.42	DEG.	F	ALM
C	26	BATTERY LEFT	105.98	DEG.	F	ALM
C	27	BATTERY RIGHT	105.75	DEG.	F	ALM
C	28	AIR IN SET	126.05	DEG.	F	ALM
C	29	FUEL TANK	90.898	DEG.	F	ALM
C	30	FUEL OUTLET	133.18	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 06:55:17

STOPPED SINGLE SCAN 10 NOV 87 06:55:17

BEGIN SCAN GROUP 1 10 NOV 87 07:04:00
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	765.31	DEG.	F	ALM
C	2	EXHAUST 2	787.84	DEG.	F	ALM
C	3	EXHAUST 3	815.50	DEG.	F	ALM
C	4	EXHAUST 4	787.49	DEG.	F	ALM
C	5	EXHAUST 5	775.02	DEG.	F	ALM
C	6	EXHAUST 6	768.22	DEG.	F	ALM
C	7	ENG. COOL. IN	200.81	DEG.	F	ALM
C	8	ENG. COOL. OUT	208.77	DEG.	F	ALM
C	9	OIL SUMP	225.30	DEG.	F	ALM
C	10	OIL GALLERY	227.19	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.96	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.79	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.12	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.98	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.69	DEG.	F	ALM
C	18	GEN. AIR IN	125.20	DEG.	F	ALM
C	19	GEN. AIR OUT	139.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	128.61	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.78	DEG.	F	ALM
C	22	GEN. EXCITER	131.91	DEG.	F	ALM
C	23	GEN. VOLT. REG.	120.89	DEG.	F	ALM
C	24	CONTROL PANEL	128.00	DEG.	F	ALM
C	25	RELAY AREA	128.76	DEG.	F	ALM
C	26	BATTERY LEFT	109.31	DEG.	F	ALM
C	27	BATTERY RIGHT	108.14	DEG.	F	ALM
C	28	AIR IN SET	127.15	DEG.	F	ALM
C	29	FUEL TANK	92.313	DEG.	F	ALM
C	30	FUEL OUTLET	139.79	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:04:16

STOPPED SINGLE SCAN 10 NOV 87 07:04:16

BEGIN SCAN GROUP 1 10 NOV 87 07:14:46
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	764.52	DEG.	F	ALM
C	2	EXHAUST 2	786.68	DEG.	F	ALM
C	3	EXHAUST 3	812.54	DEG.	F	ALM
C	4	EXHAUST 4	781.86	DEG.	F	ALM
C	5	EXHAUST 5	774.09	DEG.	F	ALM
C	6	EXHAUST 6	763.63	DEG.	F	ALM
C	7	ENG. COOL. IN	201.70	DEG.	F	ALM
C	8	ENG. COOL. OUT	209.94	DEG.	F	ALM
C	9	OIL SUMP	231.50	DEG.	F	ALM
C	10	OIL GALLERY	233.26	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.43	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.82	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.72	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.42	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.84	DEG.	F	ALM
C	18	GEN. AIR IN	122.51	DEG.	F	ALM
C	19	GEN. AIR OUT	140.59	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.36	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.44	DEG.	F	ALM
C	22	GEN. EXCITER	131.08	DEG.	F	ALM
C	23	GEN. VOLT. REG.	124.41	DEG.	F	ALM
C	24	CONTROL PANEL	130.50	DEG.	F	ALM
C	25	RELAY AREA	127.71	DEG.	F	ALM
C	26	BATTERY LEFT	112.23	DEG.	F	ALM
C	27	BATTERY RIGHT	110.37	DEG.	F	ALM
C	28	AIR IN SET	124.56	DEG.	F	ALM
C	29	FUEL TANK	94.386	DEG.	F	ALM
C	30	FUEL OUTLET	145.42	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:14:57

STOPPED SINGLE SCAN 10 NOV 87 07:14:57

BEGIN SCAN GROUP 1 10 NOV 87 07:24:28
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	765.85	DEG.	F	ALM
C	2	EXHAUST 2	786.87	DEG.	F	ALM
C	3	EXHAUST 3	813.69	DEG.	F	ALM
C	4	EXHAUST 4	775.25	DEG.	F	ALM
C	5	EXHAUST 5	772.19	DEG.	F	ALM
C	6	EXHAUST 6	763.82	DEG.	F	ALM
C	7	ENG. COOL. IN	282.86	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.28	DEG.	F	ALM
C	9	OIL SUMP	233.79	DEG.	F	ALM
C	10	OIL GALLERY	235.46	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.53	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.26	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.82	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.18	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.32	DEG.	F	ALM
C	18	GEN. AIR IN	122.79	DEG.	F	ALM
C	19	GEN. AIR OUT	142.28	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.88	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.49	DEG.	F	ALM
C	22	GEN. EXCITER	131.12	DEG.	F	ALM
C	23	GEN. VOLT. REG.	126.37	DEG.	F	ALM
C	24	CONTROL PANEL	131.17	DEG.	F	ALM
C	25	RELAY AREA	127.86	DEG.	F	ALM
C	26	BATTERY LEFT	114.79	DEG.	F	ALM
C	27	BATTERY RIGHT	112.78	DEG.	F	ALM
C	28	AIR IN SET	124.27	DEG.	F	ALM
C	29	FUEL TANK	96.318	DEG.	F	ALM
C	30	FUEL OUTLET	147.37	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:24:38

STOPPED SINGLE SCAN 10 NOV 87 07:24:38

BEGIN SCAN GROUP 1 10 NOV 87 07:35:14
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	767.85	DEG.	F	ALM
C	2	EXHAUST 2	798.28	DEG.	F	ALM
C	3	EXHAUST 3	812.58	DEG.	F	ALM
C	4	EXHAUST 4	774.89	DEG.	F	ALM
C	5	EXHAUST 5	773.76	DEG.	F	ALM
C	6	EXHAUST 6	761.98	DEG.	F	ALM
C	7	ENG. COOL. IN	282.62	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.65	DEG.	F	ALM
C	9	OIL SUMP	234.97	DEG.	F	ALM
C	10	OIL GALLERY	236.64	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.64	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.72	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.58	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.87	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.91	DEG.	F	ALM
C	18	GEN. AIR IN	122.92	DEG.	F	ALM
C	19	GEN. AIR OUT	143.46	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.29	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.88	DEG.	F	ALM
C	22	GEN. EXCITER	131.16	DEG.	F	ALM
C	23	GEN. VOLT. REG.	128.12	DEG.	F	ALM
C	24	CONTROL PANEL	131.92	DEG.	F	ALM
C	25	RELAY AREA	128.22	DEG.	F	ALM
C	26	BATTERY LEFT	116.88	DEG.	F	ALM
C	27	BATTERY RIGHT	115.81	DEG.	F	ALM
C	28	AIR IN SET	125.12	DEG.	F	ALM
C	29	FUEL TANK	98.467	DEG.	F	ALM
C	30	FUEL OUTLET	148.46	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:35:24

STOPPED SINGLE SCAN 10 NOV 87 07:35:24

BEGIN SCAN GROUP 1 10 NOV 87 07:44:51
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	767.36	DEG.	F	ALM
C	2	EXHAUST 2	788.42	DEG.	F	ALM
C	3	EXHAUST 3	814.17	DEG.	F	ALM
C	4	EXHAUST 4	772.77	DEG.	F	ALM
C	5	EXHAUST 5	772.11	DEG.	F	ALM
C	6	EXHAUST 6	764.88	DEG.	F	ALM
C	7	ENG. COOL. IN	283.81	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.88	DEG.	F	ALM
C	9	OIL SUMP	235.77	DEG.	F	ALM
C	10	OIL GALLERY	237.43	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.82	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.38	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.38	DEG.	F	ALM
C	18	GEN. AIR IN	122.68	DEG.	F	ALM
C	19	GEN. AIR OUT	143.88	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.65	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.46	DEG.	F	ALM
C	22	GEN. EXCITER	131.35	DEG.	F	ALM
C	23	GEN. VOLT. REG.	129.43	DEG.	F	ALM
C	24	CONTROL PANEL	132.42	DEG.	F	ALM
C	25	RELAY AREA	128.39	DEG.	F	ALM
C	26	BATTERY LEFT	118.18	DEG.	F	ALM
C	27	BATTERY RIGHT	117.17	DEG.	F	ALM
C	28	AIR IN SET	124.61	DEG.	F	ALM
C	29	FUEL TANK	188.34	DEG.	F	ALM
C	30	FUEL OUTLET	149.43	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:45:05

STOPPED SINGLE SCAN 10 NOV 87 07:45:05

BEGIN SCAN GROUP 1 10 NOV 87 07:55:35
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	769.98	DEG.	F	ALM
C	2	EXHAUST 2	791.26	DEG.	F	ALM
C	3	EXHAUST 3	815.94	DEG.	F	ALM
C	4	EXHAUST 4	773.78	DEG.	F	ALM
C	5	EXHAUST 5	777.16	DEG.	F	ALM
C	6	EXHAUST 6	769.13	DEG.	F	ALM
C	7	ENG. COOL. IN	283.65	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.98	DEG.	F	ALM
C	9	OIL SUMP	236.37	DEG.	F	ALM
C	10	OIL GALLERY	238.88	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.35	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.44	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.99	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.88	DEG.	F	ALM
C	18	GEN. AIR IN	122.55	DEG.	F	ALM
C	19	GEN. AIR OUT	144.56	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.98	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.89	DEG.	F	ALM
C	22	GEN. EXCITER	131.81	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.77	DEG.	F	ALM
C	24	CONTROL PANEL	133.18	DEG.	F	ALM
C	25	RELAY AREA	128.82	DEG.	F	ALM
C	26	BATTERY LEFT	128.15	DEG.	F	ALM
C	27	BATTERY RIGHT	119.16	DEG.	F	ALM
C	28	AIR IN SET	124.78	DEG.	F	ALM
C	29	FUEL TANK	182.38	DEG.	F	ALM
C	30	FUEL OUTLET	148.71	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 07:55:45

STOPPED SINGLE SCAN 10 NOV 87 07:55:45

BEGIN SCAN GROUP 1 10 NOV 87 08:04:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	772.71	DEG.	F	ALM
C	2	EXHAUST 2	792.25	DEG.	F	ALM
C	3	EXHAUST 3	815.87	DEG.	F	ALM
C	4	EXHAUST 4	774.13	DEG.	F	ALM
C	5	EXHAUST 5	775.79	DEG.	F	ALM
C	6	EXHAUST 6	768.31	DEG.	F	ALM
C	7	ENG. COOL. IN	264.27	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.44	DEG.	F	ALM
C	9	OIL SUMP	236.81	DEG.	F	ALM
C	10	OIL GALLERY	238.53	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.43	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.72	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.83	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.41	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.24	DEG.	F	ALM
C	18	GEN. AIR IN	123.44	DEG.	F	ALM
C	19	GEN. AIR OUT	145.43	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.42	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.22	DEG.	F	ALM
C	22	GEN. EXCITER	132.15	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.69	DEG.	F	ALM
C	24	CONTROL PANEL	133.63	DEG.	F	ALM
C	25	RELAY AREA	128.95	DEG.	F	ALM
C	26	BATTERY LEFT	121.13	DEG.	F	ALM
C	27	BATTERY RIGHT	126.47	DEG.	F	ALM
C	28	AIR IN SET	125.88	DEG.	F	ALM
C	29	FUEL TANK	183.93	DEG.	F	ALM
C	30	FUEL OUTLET	149.31	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 08:04:27

STOPPED SINGLE SCAN 10 NOV 87 08:04:27

BEGIN SCAN GROUP 1 10 NOV 87 08:40:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	765.68	DEG.	F	ALM
C	2	EXHAUST 2	798.88	DEG.	F	ALM
C	3	EXHAUST 3	812.46	DEG.	F	ALM
C	4	EXHAUST 4	771.83	DEG.	F	ALM
C	5	EXHAUST 5	778.37	DEG.	F	ALM
C	6	EXHAUST 6	765.47	DEG.	F	ALM
C	7	ENG. COOL. IN	283.24	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.38	DEG.	F	ALM
C	9	OIL SUMP	236.75	DEG.	F	ALM
C	10	OIL GALLERY	238.41	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.18	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.63	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.65	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.57	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.24	DEG.	F	ALM
C	18	GEN. AIR IN	121.38	DEG.	F	ALM
C	19	GEN. AIR OUT	144.71	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.34	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.38	DEG.	F	ALM
C	22	GEN. EXCITER	138.73	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.11	DEG.	F	ALM
C	24	CONTROL PANEL	133.33	DEG.	F	ALM
C	25	RELAY AREA	127.54	DEG.	F	ALM
C	26	BATTERY LEFT	126.49	DEG.	F	ALM
C	27	BATTERY RIGHT	126.37	DEG.	F	ALM
C	28	AIR IN SET	123.46	DEG.	F	ALM
C	29	FUEL TANK	183.81	DEG.	F	ALM
C	30	FUEL OUTLET	158.22	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 08:40:27

STOPPED SINGLE SCAN 10 NOV 87 08:40:27

BEGIN SCAN GROUP 1 10 NOV 87 09:09:09
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	765.87	DEG.	F	ALM
C	2	EXHAUST 2	798.86	DEG.	F	ALM
C	3	EXHAUST 3	814.57	DEG.	F	ALM
C	4	EXHAUST 4	778.38	DEG.	F	ALM
C	5	EXHAUST 5	772.65	DEG.	F	ALM
C	6	EXHAUST 6	764.18	DEG.	F	ALM
C	7	ENG. COOL. IN	283.18	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.27	DEG.	F	ALM
C	9	OIL SUMP	236.47	DEG.	F	ALM
C	10	OIL GALLERY	238.11	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.89	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.36	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.68	DEG.	F	ALM
C	16	RAD. TOP RIGHT	145.66	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.24	DEG.	F	ALM
C	18	GEN. AIR IN	122.23	DEG.	F	ALM
C	19	GEN. AIR OUT	144.73	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.81	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.86	DEG.	F	ALM
C	22	GEN. EXCITER	138.77	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.49	DEG.	F	ALM
C	24	CONTROL PANEL	133.12	DEG.	F	ALM
C	25	RELAY AREA	127.68	DEG.	F	ALM
C	26	BATTERY LEFT	138.36	DEG.	F	ALM
C	27	BATTERY RIGHT	129.53	DEG.	F	ALM
C	28	AIR IN SET	124.87	DEG.	F	ALM
C	29	FUEL TANK	113.69	DEG.	F	ALM
C	30	FUEL OUTLET	158.83	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 09:09:19

STOPPED SINGLE SCAN 10 NOV 87 09:09:19

BEGIN SCAN GROUP 1 10 NOV 87 09:39:54
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	768.96	DEG.	F	ALM
C	2	EXHAUST 2	793.39	DEG.	F	ALM
C	3	EXHAUST 3	818.53	DEG.	F	ALM
C	4	EXHAUST 4	778.22	DEG.	F	ALM
C	5	EXHAUST 5	777.11	DEG.	F	ALM
C	6	EXHAUST 6	763.81	DEG.	F	ALM
C	7	ENG. COOL. IN	284.46	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.57	DEG.	F	ALM
C	9	OIL SUMP	236.88	DEG.	F	ALM
C	10	OIL GALLERY	238.44	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.63	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.92	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.83	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.82	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.92	DEG.	F	ALM
C	18	GEN. AIR IN	123.67	DEG.	F	ALM
C	19	GEN. AIR OUT	145.98	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.54	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.33	DEG.	F	ALM
C	22	GEN. EXCITER	132.58	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.23	DEG.	F	ALM
C	24	CONTROL PANEL	133.91	DEG.	F	ALM
C	25	RELAY AREA	129.33	DEG.	F	ALM
C	26	BATTERY LEFT	133.89	DEG.	F	ALM
C	27	BATTERY RIGHT	133.57	DEG.	F	ALM
C	28	AIR IN SET	125.58	DEG.	F	ALM
C	29	FUEL TANK	117.41	DEG.	F	ALM
C	30	FUEL OUTLET	151.66	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 09:40:04

STOPPED SINGLE SCAN 10 NOV 87 09:40:04

BEGIN SCAN GROUP 1 10 NOV 87 10:09:29
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	764.75	DEG.	F	ALM
C	2	EXHAUST 2	789.57	DEG.	F	ALM
C	3	EXHAUST 3	813.49	DEG.	F	ALM
C	4	EXHAUST 4	768.48	DEG.	F	ALM
C	5	EXHAUST 5	774.67	DEG.	F	ALM
C	6	EXHAUST 6	761.82	DEG.	F	ALM
C	7	ENG. COOL. IN	203.49	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.59	DEG.	F	ALM
C	9	OIL SUMP	236.88	DEG.	F	ALM
C	10	OIL GALLERY	238.58	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.80	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.57	DEG.	F	ALM
C	15	RAD. BTM LEFT	143.96	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.25	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.71	DEG.	F	ALM
C	18	GEN. AIR IN	121.59	DEG.	F	ALM
C	19	GEN. AIR OUT	144.79	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.49	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.29	DEG.	F	ALM
C	22	GEN. EXCITER	131.17	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.30	DEG.	F	ALM
C	24	CONTROL PANEL	133.67	DEG.	F	ALM
C	25	RELAY AREA	127.84	DEG.	F	ALM
C	26	BATTERY LEFT	137.27	DEG.	F	ALM
C	27	BATTERY RIGHT	136.74	DEG.	F	ALM
C	28	AIR IN SET	123.38	DEG.	F	ALM
C	29	FUEL TANK	120.69	DEG.	F	ALM
C	30	FUEL OUTLET	151.66	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 10:09:39

STOPPED SINGLE SCAN 10 NOV 87 10:09:39

BEGIN SCAN GROUP 1 10 NOV 87 10:39:56
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	771.26	DEG.	F	ALM
C	2	EXHAUST 2	796.68	DEG.	F	ALM
C	3	EXHAUST 3	818.81	DEG.	F	ALM
C	4	EXHAUST 4	773.72	DEG.	F	ALM
C	5	EXHAUST 5	779.81	DEG.	F	ALM
C	6	EXHAUST 6	769.82	DEG.	F	ALM
C	7	ENG. COOL. IN	204.19	DEG.	F	ALM
C	8	ENG. COOL. OUT	212.37	DEG.	F	ALM
C	9	OIL SUMP	237.82	DEG.	F	ALM
C	10	OIL GALLERY	238.69	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.69	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.19	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.43	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.68	DEG.	F	ALM
C	17	RAD. BTM RIGHT	149.28	DEG.	F	ALM
C	18	GEN. AIR IN	122.86	DEG.	F	ALM
C	19	GEN. AIR OUT	145.28	DEG.	F	ALM
C	20	GEN. FRAME TOP	131.11	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.83	DEG.	F	ALM
C	22	GEN. EXCITER	131.62	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.41	DEG.	F	ALM
C	24	CONTROL PANEL	133.73	DEG.	F	ALM
C	25	RELAY AREA	128.39	DEG.	F	ALM
C	26	BATTERY LEFT	148.36	DEG.	F	ALM
C	27	BATTERY RIGHT	148.97	DEG.	F	ALM
C	28	AIR IN SET	124.69	DEG.	F	ALM
C	29	FUEL TANK	123.34	DEG.	F	ALM
C	30	FUEL OUTLET	152.60	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 10:40:06

STOPPED SINGLE SCAN 10 NOV 87 10:40:06

BEGIN SCAN GROUP 1 10 NOV 87 11:10:15
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	773.81	DEG.	F	ALM
C	2	EXHAUST 2	797.73	DEG.	F	ALM
C	3	EXHAUST 3	817.72	DEG.	F	ALM
C	4	EXHAUST 4	774.83	DEG.	F	ALM
C	5	EXHAUST 5	777.89	DEG.	F	ALM
C	6	EXHAUST 6	767.62	DEG.	F	ALM
C	7	ENG. COOL. IN	205.36	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.55	DEG.	F	ALM
C	9	OIL SUMP	238.21	DEG.	F	ALM
C	10	OIL GALLERY	239.80	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.34	DEG.	F	ALM
C	14	RAD. TOP LEFT	149.83	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.34	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.73	DEG.	F	ALM
C	17	RAD. BTM RIGHT	158.18	DEG.	F	ALM
C	18	GEN. AIR IN	123.35	DEG.	F	ALM
C	19	GEN. AIR OUT	146.66	DEG.	F	ALM
C	20	GEN. FRAME TOP	132.41	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.99	DEG.	F	ALM
C	22	GEN. EXCITER	132.36	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.43	DEG.	F	ALM
C	24	CONTROL PANEL	135.82	DEG.	F	ALM
C	25	RELAY AREA	129.48	DEG.	F	ALM
C	26	BATTERY LEFT	143.67	DEG.	F	ALM
C	27	BATTERY RIGHT	145.28	DEG.	F	ALM
C	28	AIR IN SET	125.43	DEG.	F	ALM
C	29	FUEL TANK	125.55	DEG.	F	ALM
C	30	FUEL OUTLET	153.68	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 11:10:25

STOPPED SINGLE SCAN 10 NOV 87 11:10:25

BEGIN SCAN GROUP 1 10 NOV 87 11:39:54
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	767.84	DEG.	F	ALM
C	2	EXHAUST 2	795.28	DEG.	F	ALM
C	3	EXHAUST 3	815.50	DEG.	F	ALM
C	4	EXHAUST 4	778.80	DEG.	F	ALM
C	5	EXHAUST 5	778.35	DEG.	F	ALM
C	6	EXHAUST 6	769.51	DEG.	F	ALM
C	7	ENG. COOL. IN	203.88	DEG.	F	ALM
C	8	ENG. COOL. OUT	211.62	DEG.	F	ALM
C	9	OIL SUMP	236.78	DEG.	F	ALM
C	10	OIL GALLERY	238.53	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.87	DEG.	F	ALM
C	14	RAD. TOP LEFT	148.56	DEG.	F	ALM
C	15	RAD. BTM LEFT	144.16	DEG.	F	ALM
C	16	RAD. TOP RIGHT	146.24	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.88	DEG.	F	ALM
C	18	GEN. AIR IN	122.12	DEG.	F	ALM
C	19	GEN. AIR OUT	145.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	138.51	DEG.	F	ALM
C	21	GEN. FRAME BTM	126.88	DEG.	F	ALM
C	22	GEN. EXCITER	138.95	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.53	DEG.	F	ALM
C	24	CONTROL PANEL	133.45	DEG.	F	ALM
C	25	RELAY AREA	127.91	DEG.	F	ALM
C	26	BATTERY LEFT	145.98	DEG.	F	ALM
C	27	BATTERY RIGHT	147.41	DEG.	F	ALM
C	28	AIR IN SET	124.56	DEG.	F	ALM
C	29	FUEL TANK	127.18	DEG.	F	ALM
C	30	FUEL OUTLET	152.28	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 11:40:04

STOPPED SINGLE SCAN 10 NOV 87 11:40:04

BEGIN SCAN GROUP 1 10 NOV 87 12:09:45
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	771.66	DEG.	F	ALM
C	2	EXHAUST 2	797.88	DEG.	F	ALM
C	3	EXHAUST 3	817.96	DEG.	F	ALM
C	4	EXHAUST 4	776.23	DEG.	F	ALM
C	5	EXHAUST 5	785.82	DEG.	F	ALM
C	6	EXHAUST 6	774.47	DEG.	F	ALM
C	7	ENG. COOL. IN	285.43	DEG.	F	ALM
C	8	ENG. COOL. OUT	213.59	DEG.	F	ALM
C	9	OIL SUMP	237.33	DEG.	F	ALM
C	10	OIL GALLERY	239.18	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	132.75	DEG.	F	ALM
C	14	RAD. TOP LEFT	158.52	DEG.	F	ALM
C	15	RAD. BTM LEFT	145.94	DEG.	F	ALM
C	16	RAD. TOP RIGHT	147.85	DEG.	F	ALM
C	17	RAD. BTM RIGHT	158.49	DEG.	F	ALM
C	18	GEN. AIR IN	124.47	DEG.	F	ALM
C	19	GEN. AIR OUT	146.96	DEG.	F	ALM
C	20	GEN. FRAME TOP	132.15	DEG.	F	ALM
C	21	GEN. FRAME BTM	127.78	DEG.	F	ALM
C	22	GEN. EXCITER	132.73	DEG.	F	ALM
C	23	GEN. VOLT. REG.	135.86	DEG.	F	ALM
C	24	CONTROL PANEL	134.43	DEG.	F	ALM
C	25	RELAY AREA	129.92	DEG.	F	ALM
C	26	BATTERY LEFT	148.38	DEG.	F	ALM
C	27	BATTERY RIGHT	149.86	DEG.	F	ALM
C	28	AIR IN SET	126.76	DEG.	F	ALM
C	29	FUEL TANK	128.46	DEG.	F	ALM
C	30	FUEL OUTLET	152.64	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:09:55

STOPPED SINGLE SCAN 10 NOV 87 12:09:55

BEGIN SCAN GROUP 1 10 NOV 87 12:21:29
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	327.19	DEG.	F	ALM
C	2	EXHAUST 2	327.89	DEG.	F	ALM
C	3	EXHAUST 3	318.22	DEG.	F	ALM
C	4	EXHAUST 4	363.94	DEG.	F	ALM
C	5	EXHAUST 5	372.36	DEG.	F	ALM
C	6	EXHAUST 6	357.55	DEG.	F	ALM
C	7	ENG. COOL. IN	175.33	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.99	DEG.	F	ALM
C	9	OIL SUMP	225.12	DEG.	F	ALM
C	10	OIL GALLERY	226.29	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.38	DEG.	F	ALM
C	14	RAD. TOP LEFT	138.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.65	DEG.	F	ALM
C	16	RAD. TOP RIGHT	139.91	DEG.	F	ALM
C	17	RAD. BTM RIGHT	148.93	DEG.	F	ALM
C	18	GEN. AIR IN	122.68	DEG.	F	ALM
C	19	GEN. AIR OUT	138.38	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.89	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.75	DEG.	F	ALM
C	22	GEN. EXCITER	129.58	DEG.	F	ALM
C	23	GEN. VOLT. REG.	134.84	DEG.	F	ALM
C	24	CONTROL PANEL	133.87	DEG.	F	ALM
C	25	RELAY AREA	126.19	DEG.	F	ALM
C	26	BATTERY LEFT	148.45	DEG.	F	ALM
C	27	BATTERY RIGHT	158.55	DEG.	F	ALM
C	28	AIR IN SET	124.88	DEG.	F	ALM
C	29	FUEL TANK	128.68	DEG.	F	ALM
C	30	FUEL OUTLET	152.88	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:21:39

STOPPED SINGLE SCAN 10 NOV 87 12:21:39

BEGIN SCAN GROUP 1 10 NOV 87 12:31:33
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	333.55	DEG.	F	ALM
C	2	EXHAUST 2	332.73	DEG.	F	ALM
C	3	EXHAUST 3	322.72	DEG.	F	ALM
C	4	EXHAUST 4	356.81	DEG.	F	ALM
C	5	EXHAUST 5	365.20	DEG.	F	ALM
C	6	EXHAUST 6	348.98	DEG.	F	ALM
C	7	ENG. COOL. IN	171.99	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.23	DEG.	F	ALM
C	9	OIL SUMP	216.93	DEG.	F	ALM
C	10	OIL GALLERY	218.82	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.65	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.63	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.47	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.71	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.78	DEG.	F	ALM
C	18	GEN. AIR IN	121.59	DEG.	F	ALM
C	19	GEN. AIR OUT	134.74	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.53	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.74	DEG.	F	ALM
C	22	GEN. EXCITER	129.45	DEG.	F	ALM
C	23	GEN. VOLT. REG.	133.81	DEG.	F	ALM
C	24	CONTROL PANEL	132.17	DEG.	F	ALM
C	25	RELAY AREA	125.36	DEG.	F	ALM
C	26	BATTERY LEFT	148.48	DEG.	F	ALM
C	27	BATTERY RIGHT	158.61	DEG.	F	ALM
C	28	AIR IN SET	123.57	DEG.	F	ALM
C	29	FUEL TANK	128.74	DEG.	F	ALM
C	30	FUEL OUTLET	158.94	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:31:46

STOPPED SINGLE SCAN 10 NOV 87 12:31:46

BEGIN SCAN GROUP 1 10 NOV 87 12:40:46
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	325.42	DEG.	F	ALM
C	2	EXHAUST 2	338.36	DEG.	F	ALM
C	3	EXHAUST 3	328.85	DEG.	F	ALM
C	4	EXHAUST 4	358.25	DEG.	F	ALM
C	5	EXHAUST 5	365.96	DEG.	F	ALM
C	6	EXHAUST 6	348.87	DEG.	F	ALM
C	7	ENG. COOL. IN	178.92	DEG.	F	ALM
C	8	ENG. COOL. OUT	179.65	DEG.	F	ALM
C	9	OIL SUMP	214.89	DEG.	F	ALM
C	10	OIL GALLERY	214.56	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.41	DEG.	F	ALM
C	14	RAD. TOP LEFT	134.98	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.74	DEG.	F	ALM
C	16	RAD. TOP RIGHT	136.79	DEG.	F	ALM
C	17	RAD. BTM RIGHT	137.54	DEG.	F	ALM
C	18	GEN. AIR IN	121.91	DEG.	F	ALM
C	19	GEN. AIR OUT	132.88	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.38	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.28	DEG.	F	ALM
C	22	GEN. EXCITER	128.95	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.23	DEG.	F	ALM
C	24	CONTROL PANEL	131.43	DEG.	F	ALM
C	25	RELAY AREA	124.98	DEG.	F	ALM
C	26	BATTERY LEFT	148.44	DEG.	F	ALM
C	27	BATTERY RIGHT	151.32	DEG.	F	ALM
C	28	AIR IN SET	123.88	DEG.	F	ALM
C	29	FUEL TANK	128.59	DEG.	F	ALM
C	30	FUEL OUTLET	148.96	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:40:56

STOPPED SINGLE SCAN 10 NOV 87 12:40:56

BEGIN SCAN GROUP 1 10 NOV 87 12:50:47
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	327.24	DEG.	F	ALM
C	2	EXHAUST 2	332.84	DEG.	F	ALM
C	3	EXHAUST 3	321.26	DEG.	F	ALM
C	4	EXHAUST 4	358.93	DEG.	F	ALM
C	5	EXHAUST 5	369.40	DEG.	F	ALM
C	6	EXHAUST 6	349.66	DEG.	F	ALM
C	7	ENG. COOL. IN	172.39	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.18	DEG.	F	ALM
C	9	OIL SUMP	213.36	DEG.	F	ALM
C	10	OIL GALLERY	213.55	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.33	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.90	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.75	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.90	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.86	DEG.	F	ALM
C	18	GEN. AIR IN	121.95	DEG.	F	ALM
C	19	GEN. AIR OUT	132.75	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.86	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.86	DEG.	F	ALM
C	22	GEN. EXCITER	138.64	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.60	DEG.	F	ALM
C	24	CONTROL PANEL	132.46	DEG.	F	ALM
C	25	RELAY AREA	126.33	DEG.	F	ALM
C	26	BATTERY LEFT	148.56	DEG.	F	ALM
C	27	BATTERY RIGHT	151.32	DEG.	F	ALM
C	28	AIR IN SET	123.69	DEG.	F	ALM
C	29	FUEL TANK	128.52	DEG.	F	ALM
C	30	FUEL OUTLET	148.77	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 12:50:57

STOPPED SINGLE SCAN 10 NOV 87 12:50:57

BEGIN SCAN GROUP 1 10 NOV 87 13:24:31
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	324.71	DEG.	F	ALM
C	2	EXHAUST 2	332.57	DEG.	F	ALM
C	3	EXHAUST 3	323.88	DEG.	F	ALM
C	4	EXHAUST 4	362.71	DEG.	F	ALM
C	5	EXHAUST 5	368.62	DEG.	F	ALM
C	6	EXHAUST 6	348.33	DEG.	F	ALM
C	7	ENG. COOL. IN	171.71	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.87	DEG.	F	ALM
C	9	OIL SUMP	211.81	DEG.	F	ALM
C	10	OIL GALLERY	211.89	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.73	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.72	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.16	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.38	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.38	DEG.	F	ALM
C	18	GEN. AIR IN	122.29	DEG.	F	ALM
C	19	GEN. AIR OUT	138.83	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.16	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.38	DEG.	F	ALM
C	22	GEN. EXCITER	138.89	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.81	DEG.	F	ALM
C	24	CONTROL PANEL	138.98	DEG.	F	ALM
C	25	RELAY AREA	125.74	DEG.	F	ALM
C	26	BATTERY LEFT	148.64	DEG.	F	ALM
C	27	BATTERY RIGHT	152.32	DEG.	F	ALM
C	28	AIR IN SET	124.01	DEG.	F	ALM
C	29	FUEL TANK	127.89	DEG.	F	ALM
C	30	FUEL OUTLET	147.84	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 13:24:41

STOPPED SINGLE SCAN 10 NOV 87 13:24:41

BEGIN SCAN GROUP 1 10 NOV 87 13:54:16
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	333.18	DEG.	F	ALM
C	2	EXHAUST 2	337.22	DEG.	F	ALM
C	3	EXHAUST 3	326.11	DEG.	F	ALM
C	4	EXHAUST 4	355.06	DEG.	F	ALM
C	5	EXHAUST 5	365.58	DEG.	F	ALM
C	6	EXHAUST 6	345.83	DEG.	F	ALM
C	7	ENG. COOL. IN	171.69	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.01	DEG.	F	ALM
C	9	OIL SUMP	212.17	DEG.	F	ALM
C	10	OIL GALLERY	212.23	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.43	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.85	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.39	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.44	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.28	DEG.	F	ALM
C	18	GEN. AIR IN	123.83	DEG.	F	ALM
C	19	GEN. AIR OUT	138.74	DEG.	F	ALM
C	20	GEN. FRAME TOP	125.96	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.25	DEG.	F	ALM
C	22	GEN. EXCITER	129.85	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.63	DEG.	F	ALM
C	24	CONTROL PANEL	131.16	DEG.	F	ALM
C	25	RELAY AREA	125.98	DEG.	F	ALM
C	26	BATTERY LEFT	148.79	DEG.	F	ALM
C	27	BATTERY RIGHT	153.18	DEG.	F	ALM
C	28	AIR IN SET	124.18	DEG.	F	ALM
C	29	FUEL TANK	127.56	DEG.	F	ALM
C	30	FUEL OUTLET	147.32	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 13:54:26

STOPPED SINGLE SCAN 10 NOV 87 13:54:27

BEGIN SCAN GROUP 1 10 NOV 87 14:24:30
30KW 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	334.65	DEG.	F	ALM
C	2	EXHAUST 2	333.59	DEG.	F	ALM
C	3	EXHAUST 3	324.42	DEG.	F	ALM
C	4	EXHAUST 4	358.43	DEG.	F	ALM
C	5	EXHAUST 5	364.48	DEG.	F	ALM
C	6	EXHAUST 6	347.62	DEG.	F	ALM
C	7	ENG. COOL. IN	171.76	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.88	DEG.	F	ALM
C	9	OIL SUMP	212.41	DEG.	F	ALM
C	10	OIL GALLERY	212.59	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.16	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.34	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.28	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.87	DEG.	F	ALM
C	18	GEN. AIR IN	122.85	DEG.	F	ALM
C	19	GEN. AIR OUT	138.35	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.88	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.61	DEG.	F	ALM
C	22	GEN. EXCITER	129.61	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.88	DEG.	F	ALM
C	24	CONTROL PANEL	131.55	DEG.	F	ALM
C	25	RELAY AREA	125.66	DEG.	F	ALM
C	26	BATTERY LEFT	148.91	DEG.	F	ALM
C	27	BATTERY RIGHT	153.52	DEG.	F	ALM
C	28	AIR IN SET	123.46	DEG.	F	ALM
C	29	FUEL TANK	127.61	DEG.	F	ALM
C	30	FUEL OUTLET	148.19	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 14:24:40

STOPPED SINGLE SCAN 10 NOV 87 14:24:40

BEGIN SCAN GROUP 1 10 NOV 87 14:54:53
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	333.13	DEG.	F	ALM
C	2	EXHAUST 2	338.54	DEG.	F	ALM
C	3	EXHAUST 3	327.13	DEG.	F	ALM
C	4	EXHAUST 4	368.83	DEG.	F	ALM
C	5	EXHAUST 5	364.89	DEG.	F	ALM
C	6	EXHAUST 6	344.27	DEG.	F	ALM
C	7	ENG. COOL. IN	172.82	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.25	DEG.	F	ALM
C	9	OIL SUMP	212.35	DEG.	F	ALM
C	10	OIL GALLERY	212.51	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.58	DEG.	F	ALM
C	14	RAD. TOP LEFT	136.88	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.49	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.59	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.46	DEG.	F	ALM
C	18	GEN. AIR IN	123.24	DEG.	F	ALM
C	19	GEN. AIR OUT	138.79	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.18	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.84	DEG.	F	ALM
C	22	GEN. EXCITER	138.86	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.86	DEG.	F	ALM
C	24	CONTROL PANEL	131.59	DEG.	F	ALM
C	25	RELAY AREA	126.82	DEG.	F	ALM
C	26	BATTERY LEFT	149.28	DEG.	F	ALM
C	27	BATTERY RIGHT	154.18	DEG.	F	ALM
C	28	AIR IN SET	124.48	DEG.	F	ALM
C	29	FUEL TANK	127.58	DEG.	F	ALM
C	30	FUEL OUTLET	148.56	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 14:55:03

STOPPED SINGLE SCAN 10 NOV 87 14:55:03

BEGIN SCAN GROUP 1 10 NOV 87 15:24:43
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	335.63	DEG.	F	ALM
C	2	EXHAUST 2	336.33	DEG.	F	ALM
C	3	EXHAUST 3	328.88	DEG.	F	ALM
C	4	EXHAUST 4	368.46	DEG.	F	ALM
C	5	EXHAUST 5	366.77	DEG.	F	ALM
C	6	EXHAUST 6	345.41	DEG.	F	ALM
C	7	ENG. COOL. IN	172.44	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.69	DEG.	F	ALM
C	9	OIL SUMP	212.85	DEG.	F	ALM
C	10	OIL GALLERY	212.98	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.83	DEG.	F	ALM
C	14	RAD. TOP LEFT	136.37	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.72	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.99	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.76	DEG.	F	ALM
C	18	GEN. AIR IN	123.39	DEG.	F	ALM
C	19	GEN. AIR OUT	131.17	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.67	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.48	DEG.	F	ALM
C	22	GEN. EXCITER	138.61	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.17	DEG.	F	ALM
C	24	CONTROL PANEL	131.95	DEG.	F	ALM
C	25	RELAY AREA	126.31	DEG.	F	ALM
C	26	BATTERY LEFT	149.49	DEG.	F	ALM
C	27	BATTERY RIGHT	155.29	DEG.	F	ALM
C	28	AIR IN SET	124.74	DEG.	F	ALM
C	29	FUEL TANK	127.58	DEG.	F	ALM
C	30	FUEL OUTLET	148.68	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 15:24:53

STOPPED SINGLE SCAN 10 NOV 87 15:24:53

BEGIN SCAN GROUP 1 10 NOV 87 15:54:14
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	336.44	DEG.	F	ALM
C	2	EXHAUST 2	338.68	DEG.	F	ALM
C	3	EXHAUST 3	331.89	DEG.	F	ALM
C	4	EXHAUST 4	368.59	DEG.	F	ALM
C	5	EXHAUST 5	366.17	DEG.	F	ALM
C	6	EXHAUST 6	344.94	DEG.	F	ALM
C	7	ENG. COOL. IN	172.67	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.87	DEG.	F	ALM
C	9	OIL SUMP	213.86	DEG.	F	ALM
C	10	OIL GALLERY	213.12	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.88	DEG.	F	ALM
C	14	RAD. TOP LEFT	136.34	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.88	DEG.	F	ALM
C	16	RAD. TOP RIGHT	138.85	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.98	DEG.	F	ALM
C	18	GEN. AIR IN	123.41	DEG.	F	ALM
C	19	GEN. AIR OUT	131.55	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.79	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.47	DEG.	F	ALM
C	22	GEN. EXCITER	138.37	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.39	DEG.	F	ALM
C	24	CONTROL PANEL	132.16	DEG.	F	ALM
C	25	RELAY AREA	126.45	DEG.	F	ALM
C	26	BATTERY LEFT	149.97	DEG.	F	ALM
C	27	BATTERY RIGHT	155.83	DEG.	F	ALM
C	28	AIR IN SET	124.47	DEG.	F	ALM
C	29	FUEL TANK	127.88	DEG.	F	ALM
C	30	FUEL OUTLET	148.55	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 15:54:56

STOPPED SINGLE SCAN 10 NOV 87 15:54:56

BEGIN SCAN GROUP 1 10 NOV 87 16:24:47
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	336.87	DEG.	F	ALM
C	2	EXHAUST 2	336.49	DEG.	F	ALM
C	3	EXHAUST 3	332.22	DEG.	F	ALM
C	4	EXHAUST 4	368.25	DEG.	F	ALM
C	5	EXHAUST 5	362.18	DEG.	F	ALM
C	6	EXHAUST 6	343.75	DEG.	F	ALM
C	7	ENG. COOL. IN	171.57	DEG.	F	ALM
C	8	ENG. COOL. OUT	188.85	DEG.	F	ALM
C	9	OIL SUMP	212.55	DEG.	F	ALM
C	10	OIL GALLERY	212.75	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	126.55	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.17	DEG.	F	ALM
C	15	RAD. BTM LEFT	134.59	DEG.	F	ALM
C	16	RAD. TOP RIGHT	136.98	DEG.	F	ALM
C	17	RAD. BTM RIGHT	137.78	DEG.	F	ALM
C	18	GEN. AIR IN	122.83	DEG.	F	ALM
C	19	GEN. AIR OUT	138.13	DEG.	F	ALM
C	20	GEN. FRAME TOP	125.45	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.86	DEG.	F	ALM
C	22	GEN. EXCITER	129.13	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.88	DEG.	F	ALM
C	24	CONTROL PANEL	131.12	DEG.	F	ALM
C	25	RELAY AREA	125.15	DEG.	F	ALM
C	26	BATTERY LEFT	149.89	DEG.	F	ALM
C	27	BATTERY RIGHT	155.64	DEG.	F	ALM
C	28	AIR IN SET	123.86	DEG.	F	ALM
C	29	FUEL TANK	126.88	DEG.	F	ALM
C	30	FUEL OUTLET	147.96	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 16:24:57

STOPPED SINGLE SCAN 10 NOV 87 16:24:57

BEGIN SCAN GROUP 1 10 NOV 87 16:54:45
 30RM 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	343.77	DEG.	F	ALM
C	2	EXHAUST 2	331.26	DEG.	F	ALM
C	3	EXHAUST 3	329.71	DEG.	F	ALM
C	4	EXHAUST 4	365.36	DEG.	F	ALM
C	5	EXHAUST 5	362.04	DEG.	F	ALM
C	6	EXHAUST 6	346.89	DEG.	F	ALM
C	7	ENG. COOL. IN	172.28	DEG.	F	ALM
C	8	ENG. COOL. OUT	181.43	DEG.	F	ALM
C	9	OIL SUMP	212.96	DEG.	F	ALM
C	10	OIL GALLERY	212.94	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	127.44	DEG.	F	ALM
C	14	RAD. TOP LEFT	135.93	DEG.	F	ALM
C	15	RAD. BTM LEFT	135.35	DEG.	F	ALM
C	16	RAD. TOP RIGHT	137.62	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.44	DEG.	F	ALM
C	18	GEN. AIR IN	123.24	DEG.	F	ALM
C	19	GEN. AIR OUT	131.84	DEG.	F	ALM
C	20	GEN. FRAME TOP	126.19	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.78	DEG.	F	ALM
C	22	GEN. EXCITER	138.16	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.11	DEG.	F	ALM
C	24	CONTROL PANEL	131.64	DEG.	F	ALM
C	25	RELAY AREA	125.93	DEG.	F	ALM
C	26	BATTERY LEFT	158.31	DEG.	F	ALM
C	27	BATTERY RIGHT	156.41	DEG.	F	ALM
C	28	AIR IN SET	124.85	DEG.	F	ALM
C	29	FUEL TANK	126.78	DEG.	F	ALM
C	30	FUEL OUTLET	148.93	DEG.	F	ALM

END SCAN GROUP 1 10 NOV 87 16:54:55

STOPPED SINGLE SCAN 10 NOV 87 16:54:55

TEST DATA

ITEM 301KW 60 Hz

GENERATOR SET

MODIFIED

MFG. LIBBY WELDING

MODEL NO. MEP 005A

SERIAL NO. RZ 53774

NTS

National Scientific Testing Division
 Technical Services PO Box 38
 Systems Group Harwood, Virginia 22471
 Tel: 703 752 5300

VOLTAGE DIP + RISE

HIGH TEMP 70.1.3.2 (F) (9)

REF. NO. MIL-STD 705 612.2B

SHEET OF

DATE 14 NOV 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER BJ/KM/GC

INST TIME	STEP NO.	LOAD STEP	E60280 VOLTAGE			E60400 AMPERES X 40			E62300 KILOWATTS X 40			POWER FACTOR	FREQ. Hz	E61890 EXCITER FIELD		AMB. TEMP. °F	PRESS IN. HG
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW			VOLTS VDC	AMPS KA		
1215		STARTED UNIT															
1220		R/L	119	120.7	120	2.51	2.55	2.55	.248	.251	.25	.80	60	9.1	3.4	125	41.4
1230		R/L	119	120.3	120	2.57	2.55	2.55	.248	.251	.25	.80	60	9.3	3.5	122	41.2
1240		R/L	119	120.5	120	2.57	2.55	2.55	.248	.251	.25	.80	59.9	9.4	3.5	121	41.0
1250		R/L	119	120.5	120	2.57	2.55	2.55	.248	.251	.25	.80	59.9	9.4	3.6	121	40.9
1300		R/L	119	120.5	120	2.57	2.55	2.55	.248	.251	.25	.80	59.9	9.4	3.6	122	40.8
1310		R/L	119	120.5	120	2.57	2.55	2.55	.248	.251	.25	.80	59.9	9.4	3.6	124	41.2
1316		N/L	121	121.5	121.5	2.53	2.56	2.55	.246	.252	.25	.80	62	9.9	1.4	124	42.2
1317		R/L	119	120.5	120	2.53	2.56	2.55	.246	.252	.25	.80	62	9.4	3.6	125	42.3
1318		N/L	121	121.5	121.5	2.53	2.56	2.55	.246	.252	.25	.80	62	9.9	1.4	124	42.7
1319		R/L	119	120.5	120	2.53	2.56	2.55	.246	.252	.25	.80	59.8	9.4	3.6	124	42.4
1320		N/L	121	121.5	121.5	2.53	2.56	2.55	.246	.252	.25	.80	62	9.7	1.4	123	42.7
1321		R/L	119	120.5	120	2.53	2.56	2.55	.246	.252	.25	.80	59.8	9.4	3.6	122	42.4
1323		SHUT UNIT															

NOTES:

B-244

VOLTAGE DIP + RUC 619.26

BEGIN SCAN GROUP 1 14 NOV 87 12:29:17
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	777.85	DEG.	F	ALM
C	2	EXHAUST 2	787.29	DEG.	F	ALM
C	3	EXHAUST 3	811.75	DEG.	F	ALM
C	4	EXHAUST 4	776.84	DEG.	F	ALM
C	5	EXHAUST 5	788.81	DEG.	F	ALM
C	6	EXHAUST 6	763.71	DEG.	F	ALM
C	7	ENG. COOL. IN	198.99	DEG.	F	ALM
C	8	ENG. COOL. OUT	206.98	DEG.	F	ALM
C	9	OIL SUMP	213.29	DEG.	F	ALM
C	10	OIL GALLERY	226.14	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.47	DEG.	F	ALM
C	14	RAD. TOP LEFT	145.27	DEG.	F	ALM
C	15	RAD. BTM LEFT	148.33	DEG.	F	ALM
C	16	RAD. TOP RIGHT	141.84	DEG.	F	ALM
C	17	RAD. BTM RIGHT	144.57	DEG.	F	ALM
C	18	GEN. AIR IN	128.53	DEG.	F	ALM
C	19	GEN. AIR OUT	138.69	DEG.	F	ALM
C	20	GEN. FRAME TOP	128.81	DEG.	F	ALM
C	21	GEN. FRAME BTM	124.79	DEG.	F	ALM
C	22	GEN. EXCITER	129.32	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.88	DEG.	F	ALM
C	24	CONTROL PANEL	132.57	DEG.	F	ALM
C	25	RELAY AREA	126.38	DEG.	F	ALM
C	26	BATTERY LEFT	117.38	DEG.	F	ALM
C	27	BATTERY RIGHT	128.81	DEG.	F	ALM
C	28	AIR IN SET	122.87	DEG.	F	ALM
C	29	FUEL TANK	184.51	DEG.	F	ALM
C	30	FUEL OUTLET	147.96	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 12:29:27

STOPPED SINGLE SCAN 14 NOV 87 12:29:27

BEGIN SCAN GROUP 1 14 NOV 87 12:48:48
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	776.87	DEG.	F	ALM
C	2	EXHAUST 2	787.38	DEG.	F	ALM
C	3	EXHAUST 3	811.52	DEG.	F	ALM
C	4	EXHAUST 4	776.85	DEG.	F	ALM
C	5	EXHAUST 5	779.38	DEG.	F	ALM
C	6	EXHAUST 6	763.77	DEG.	F	ALM
C	7	ENG. COOL. IN	199.78	DEG.	F	ALM
C	8	ENG. COOL. OUT	207.72	DEG.	F	ALM
C	9	OIL SUMP	215.47	DEG.	F	ALM
C	10	OIL GALLERY	232.34	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.85	DEG.	F	ALM
C	14	RAD. TOP LEFT	145.55	DEG.	F	ALM
C	15	RAD. BTM LEFT	148.49	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.43	DEG.	F	ALM
C	17	RAD. BTM RIGHT	144.97	DEG.	F	ALM
C	18	GEN. AIR IN	128.85	DEG.	F	ALM
C	19	GEN. AIR OUT	139.98	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.59	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.93	DEG.	F	ALM
C	22	GEN. EXCITER	128.71	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.78	DEG.	F	ALM
C	24	CONTROL PANEL	131.53	DEG.	F	ALM
C	25	RELAY AREA	125.64	DEG.	F	ALM
C	26	BATTERY LEFT	128.86	DEG.	F	ALM
C	27	BATTERY RIGHT	123.19	DEG.	F	ALM
C	28	AIR IN SET	121.82	DEG.	F	ALM
C	29	FUEL TANK	186.88	DEG.	F	ALM
C	30	FUEL OUTLET	147.31	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 12:48:58

STOPPED SINGLE SCAN 14 NOV 87 12:48:58

BEGIN SCAN GROUP 1 14 NOV 87 12:49:42
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	776.48	DEG.	F	ALM
C	2	EXHAUST 2	787.92	DEG.	F	ALM
C	3	EXHAUST 3	808.79	DEG.	F	ALM
C	4	EXHAUST 4	776.82	DEG.	F	ALM
C	5	EXHAUST 5	781.82	DEG.	F	ALM
C	6	EXHAUST 6	763.85	DEG.	F	ALM
C	7	ENG. COOL. IN	208.88	DEG.	F	ALM
C	8	ENG. COOL. OUT	208.85	DEG.	F	ALM
C	9	OIL SUMP	221.88	DEG.	F	ALM
C	10	OIL GALLERY	234.15	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	128.89	DEG.	F	ALM
C	14	RAD. TOP LEFT	145.51	DEG.	F	ALM
C	15	RAD. BTM LEFT	148.55	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.49	DEG.	F	ALM
C	17	RAD. BTM RIGHT	145.88	DEG.	F	ALM
C	18	GEN. AIR IN	119.35	DEG.	F	ALM
C	19	GEN. AIR OUT	148.52	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.54	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.66	DEG.	F	ALM
C	22	GEN. EXCITER	128.32	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.78	DEG.	F	ALM
C	24	CONTROL PANEL	131.89	DEG.	F	ALM
C	25	RELAY AREA	125.25	DEG.	F	ALM
C	26	BATTERY LEFT	121.63	DEG.	F	ALM
C	27	BATTERY RIGHT	123.95	DEG.	F	ALM
C	28	AIR IN SET	121.77	DEG.	F	ALM
C	29	FUEL TANK	188.44	DEG.	F	ALM
C	30	FUEL OUTLET	147.25	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 12:49:51

STOPPED SINGLE SCAN 14 NOV 87 12:49:51

BEGIN SCAN GROUP 1 14 NOV 87 12:59:47
30KW 60HZ GEN SET S/NR25 3774

C	1	EXHAUST 1	776.47	DEG.	F	ALM
C	2	EXHAUST 2	787.97	DEG.	F	ALM
C	3	EXHAUST 3	811.67	DEG.	F	ALM
C	4	EXHAUST 4	777.47	DEG.	F	ALM
C	5	EXHAUST 5	788.99	DEG.	F	ALM
C	6	EXHAUST 6	762.33	DEG.	F	ALM
C	7	ENG. COOL. IN	208.27	DEG.	F	ALM
C	8	ENG. COOL. OUT	208.28	DEG.	F	ALM
C	9	OIL SUMP	221.84	DEG.	F	ALM
C	10	OIL GALLERY	235.84	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.88	DEG.	F	ALM
C	14	RAD. TOP LEFT	146.31	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.19	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.16	DEG.	F	ALM
C	17	RAD. BTM RIGHT	145.68	DEG.	F	ALM
C	18	GEN. AIR IN	128.92	DEG.	F	ALM
C	19	GEN. AIR OUT	141.86	DEG.	F	ALM
C	20	GEN. FRAME TOP	127.84	DEG.	F	ALM
C	21	GEN. FRAME BTM	123.89	DEG.	F	ALM
C	22	GEN. EXCITER	128.99	DEG.	F	ALM
C	23	GEN. VOLT. REG.	138.86	DEG.	F	ALM
C	24	CONTROL PANEL	138.78	DEG.	F	ALM
C	25	RELAY AREA	125.65	DEG.	F	ALM
C	26	BATTERY LEFT	123.48	DEG.	F	ALM
C	27	BATTERY RIGHT	127.11	DEG.	F	ALM
C	28	AIR IN SET	123.38	DEG.	F	ALM
C	29	FUEL TANK	188.24	DEG.	F	ALM
C	30	FUEL OUTLET	147.92	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 12:59:57

STOPPED SINGLE SCAN 14 NOV 87 12:59:57

BEGIN SCAN GROUP 1 14 NOV 87 13:11:00
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	779.92	DEG.	F	ALM
C	2	EXHAUST 2	794.89	DEG.	F	ALM
C	3	EXHAUST 3	816.72	DEG.	F	ALM
C	4	EXHAUST 4	788.75	DEG.	F	ALM
C	5	EXHAUST 5	786.21	DEG.	F	ALM
C	6	EXHAUST 6	768.89	DEG.	F	ALM
C	7	ENG. COOL. IN	201.97	DEG.	F	ALM
C	8	ENG. COOL. OUT	218.21	DEG.	F	ALM
C	9	OIL SUMP	222.93	DEG.	F	ALM
C	10	OIL GALLERY	236.13	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	131.88	DEG.	F	ALM
C	14	RAD. TOP LEFT	147.83	DEG.	F	ALM
C	15	RAD. BTM LEFT	142.95	DEG.	F	ALM
C	16	RAD. TOP RIGHT	144.63	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.21	DEG.	F	ALM
C	18	GEN. AIR IN	121.51	DEG.	F	ALM
C	19	GEN. AIR OUT	143.21	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.46	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.52	DEG.	F	ALM
C	22	GEN. EXCITER	138.38	DEG.	F	ALM
C	23	GEN. VOLT. REG.	131.62	DEG.	F	ALM
C	24	CONTROL PANEL	131.72	DEG.	F	ALM
C	25	RELAY AREA	127.37	DEG.	F	ALM
C	26	BATTERY LEFT	125.12	DEG.	F	ALM
C	27	BATTERY RIGHT	127.83	DEG.	F	ALM
C	28	AIR IN SET	124.17	DEG.	F	ALM
C	29	FUEL TANK	112.19	DEG.	F	ALM
C	30	FUEL OUTLET	148.46	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 13:11:10

STOPPED SINGLE SCAN 14 NOV 87 13:11:10

BEGIN SCAN GROUP 1 14 NOV 87 13:17:19
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	611.74	DEG.	F	ALM
C	2	EXHAUST 2	617.85	DEG.	F	ALM
C	3	EXHAUST 3	611.64	DEG.	F	ALM
C	4	EXHAUST 4	623.12	DEG.	F	ALM
C	5	EXHAUST 5	638.28	DEG.	F	ALM
C	6	EXHAUST 6	616.77	DEG.	F	ALM
C	7	ENG. COOL. IN	195.61	DEG.	F	ALM
C	8	ENG. COOL. OUT	202.89	DEG.	F	ALM
C	9	OIL SUMP	221.53	DEG.	F	ALM
C	10	OIL GALLERY	235.17	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.67	DEG.	F	ALM
C	14	RAD. TOP LEFT	145.68	DEG.	F	ALM
C	15	RAD. BTM LEFT	141.75	DEG.	F	ALM
C	16	RAD. TOP RIGHT	143.79	DEG.	F	ALM
C	17	RAD. BTM RIGHT	146.82	DEG.	F	ALM
C	18	GEN. AIR IN	122.88	DEG.	F	ALM
C	19	GEN. AIR OUT	142.43	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.88	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.78	DEG.	F	ALM
C	22	GEN. EXCITER	138.48	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.83	DEG.	F	ALM
C	24	CONTROL PANEL	132.28	DEG.	F	ALM
C	25	RELAY AREA	127.22	DEG.	F	ALM
C	26	BATTERY LEFT	126.32	DEG.	F	ALM
C	27	BATTERY RIGHT	129.88	DEG.	F	ALM
C	28	AIR IN SET	124.22	DEG.	F	ALM
C	29	FUEL TANK	113.20	DEG.	F	ALM
C	30	FUEL OUTLET	149.41	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 13:17:29

STOPPED SINGLE SCAN 14 NOV 87 13:17:29

BEGIN SCAN GROUP 1 14 NOV 87 13:18:25
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	438.34	DEG.	F	ALM
C	2	EXHAUST 2	438.72	DEG.	F	ALM
C	3	EXHAUST 3	437.15	DEG.	F	ALM
C	4	EXHAUST 4	483.45	DEG.	F	ALM
C	5	EXHAUST 5	494.48	DEG.	F	ALM
C	6	EXHAUST 6	478.17	DEG.	F	ALM
C	7	ENG. COOL. IN	198.87	DEG.	F	ALM
C	8	ENG. COOL. OUT	197.18	DEG.	F	ALM
C	9	OIL SUMP	228.64	DEG.	F	ALM
C	10	OIL GALLERY	234.14	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	138.17	DEG.	F	ALM
C	14	RAD. TOP LEFT	143.53	DEG.	F	ALM
C	15	RAD. BTM LEFT	148.94	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.74	DEG.	F	ALM
C	17	RAD. BTM RIGHT	145.86	DEG.	F	ALM
C	18	GEN. AIR IN	121.48	DEG.	F	ALM
C	19	GEN. AIR OUT	148.77	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.69	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.88	DEG.	F	ALM
C	22	GEN. EXCITER	138.44	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.84	DEG.	F	ALM
C	24	CONTROL PANEL	132.21	DEG.	F	ALM
C	25	RELAY AREA	126.86	DEG.	F	ALM
C	26	BATTERY LEFT	126.48	DEG.	F	ALM
C	27	BATTERY RIGHT	129.25	DEG.	F	ALM
C	28	AIR IN SET	123.74	DEG.	F	ALM
C	29	FUEL TANK	113.38	DEG.	F	ALM
C	30	FUEL OUTLET	158.27	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 13:18:39

STOPPED SINGLE SCAN 14 NOV 87 13:18:39

BEGIN SCAN GROUP 1 14 NOV 87 13:19:26
30KW 60HZ GEN SET S-NR25 3774

C	1	EXHAUST 1	727.48	DEG.	F	ALM
C	2	EXHAUST 2	737.86	DEG.	F	ALM
C	3	EXHAUST 3	749.87	DEG.	F	ALM
C	4	EXHAUST 4	727.63	DEG.	F	ALM
C	5	EXHAUST 5	734.88	DEG.	F	ALM
C	6	EXHAUST 6	711.44	DEG.	F	ALM
C	7	ENG. COOL. IN	191.13	DEG.	F	ALM
C	8	ENG. COOL. OUT	198.26	DEG.	F	ALM
C	9	OIL SUMP	228.88	DEG.	F	ALM
C	10	OIL GALLERY	233.52	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	129.94	DEG.	F	ALM
C	14	RAD. TOP LEFT	143.84	DEG.	F	ALM
C	15	RAD. BTM LEFT	148.72	DEG.	F	ALM
C	16	RAD. TOP RIGHT	142.48	DEG.	F	ALM
C	17	RAD. BTM RIGHT	144.51	DEG.	F	ALM
C	18	GEN. AIR IN	128.93	DEG.	F	ALM
C	19	GEN. AIR OUT	148.99	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.46	DEG.	F	ALM
C	21	GEN. FRAME BTM	125.69	DEG.	F	ALM
C	22	GEN. EXCITER	138.17	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.11	DEG.	F	ALM
C	24	CONTROL PANEL	132.19	DEG.	F	ALM
C	25	RELAY AREA	126.61	DEG.	F	ALM
C	26	BATTERY LEFT	126.37	DEG.	F	ALM
C	27	BATTERY RIGHT	129.32	DEG.	F	ALM
C	28	AIR IN SET	123.88	DEG.	F	ALM
C	29	FUEL TANK	113.57	DEG.	F	ALM
C	30	FUEL OUTLET	158.81	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 13:19:36

STOPPED SINGLE SCAN 14 NOV 87 13:19:36

BEGIN SCAN GROUP 1 14 NOV 87 13:20:37
 30KHZ 60HZ GEN SET 5-NR25 3774

C	1	EXHAUST 1	422.87	DEG.	F	ALM
C	2	EXHAUST 2	413.63	DEG.	F	ALM
C	3	EXHAUST 3	414.94	DEG.	F	ALM
C	4	EXHAUST 4	464.17	DEG.	F	ALM
C	5	EXHAUST 5	478.79	DEG.	F	ALM
C	6	EXHAUST 6	459.31	DEG.	F	ALM
C	7	ENG. COOL. IN	188.84	DEG.	F	ALM
C	8	ENG. COOL. OUT	194.16	DEG.	F	ALM
C	9	OIL SUMP	218.85	DEG.	F	ALM
C	10	OIL GALLERY	232.68	DEG.	F	ALM
C	11		.88888			
C	12		.88888			
C	13	ENG. INTAKE	129.56	DEG.	F	ALM
C	14	RAD. TOP LEFT	142.46	DEG.	F	ALM
C	15	RAD. BTM LEFT	139.98	DEG.	F	ALM
C	16	RAD. TOP RIGHT	141.66	DEG.	F	ALM
C	17	RAD. BTM RIGHT	143.92	DEG.	F	ALM
C	18	GEN. AIR IN	121.28	DEG.	F	ALM
C	19	GEN. AIR OUT	139.93	DEG.	F	ALM
C	20	GEN. FRAME TOP	129.14	DEG.	F	ALM
C	21	GEN. FRAME BTM	129.49	DEG.	F	ALM
C	22	GEN. EXCITER	129.41	DEG.	F	ALM
C	23	GEN. VOLT. REG.	132.86	DEG.	F	ALM
C	24	CONTROL PANEL	132.88	DEG.	F	ALM
C	25	RELAY AREA	126.27	DEG.	F	ALM
C	26	BATTERY LEFT	126.66	DEG.	F	ALM
C	27	BATTERY RIGHT	129.28	DEG.	F	ALM
C	28	AIR IN SET	123.34	DEG.	F	ALM
C	29	FUEL TANK	113.67	DEG.	F	ALM
C	30	FUEL OUTLET	158.48	DEG.	F	ALM

END SCAN GROUP 1 14 NOV 87 13:20:47

STOPPED SINGLE SCAN 14 NOV 87 13:20:47

NTS

GENERATOR SET

MPGR. CIBBY W&D 01/26

SERIAL NO. 625-3774

40 / SHEETS

DATE 17 Nov 1987

JOB NO. 555-2140

PROJ. ENCR.

RECORDED/OBSERVER G.C. / Z.T. / K.M.

**National
Technical
Systems**

**Scientific
Services
Group**

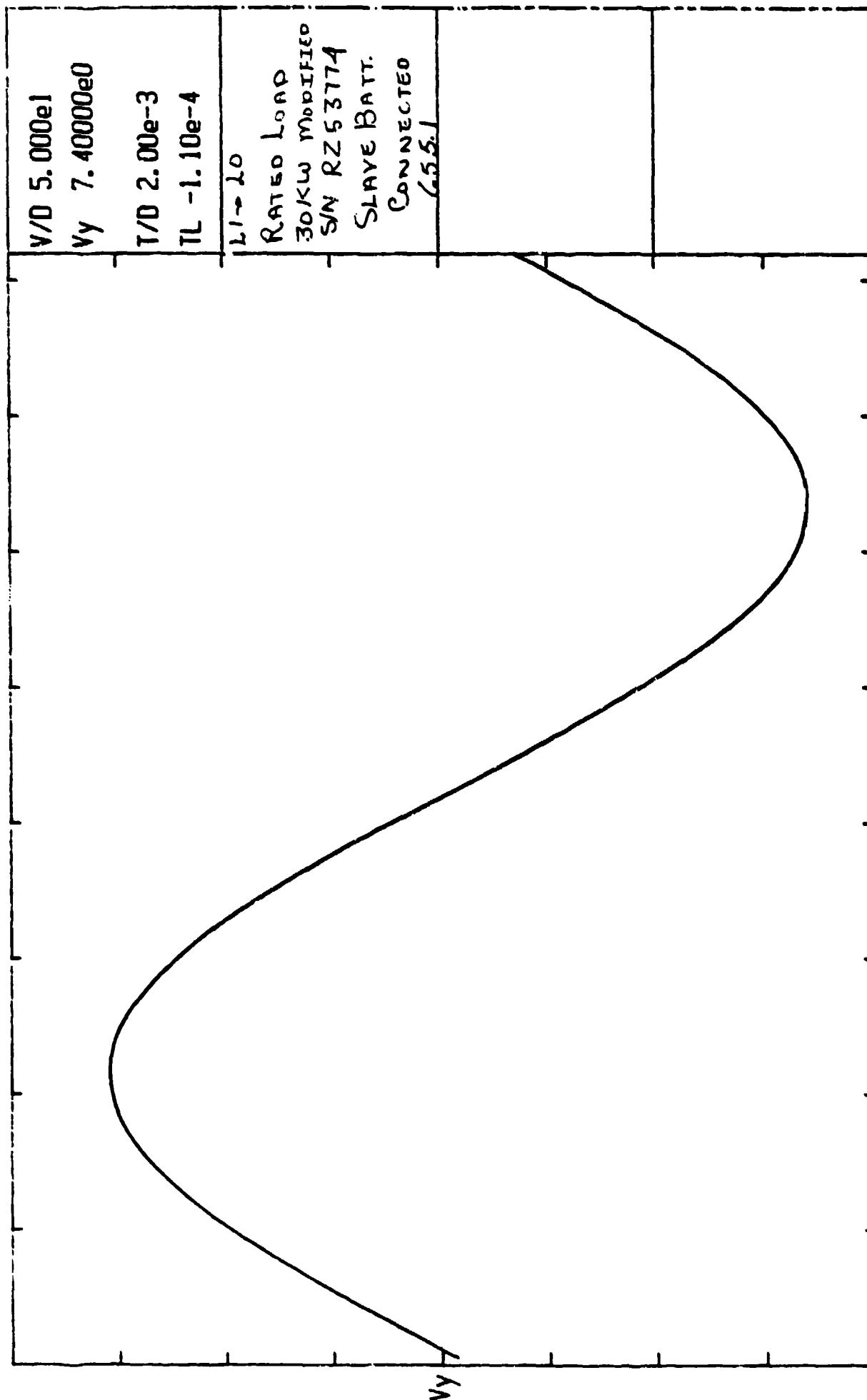
**Testing Division
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300**

7k2.1.3.2(f)(10)

D.C. CONTROL TEST

INST TIME	STEP NO.	LOAD STEP	E 6080				E 60400				E 62800				POWER FACTOR	FREQ. Hz	D.C. CONTROL VOLTS	812 AMPS	AMB. TEMP. °F	AC VOLT
			V1- VAC	V2- VAC	V3- VAC	V4- VAC	V1- AC AMPS	V2- AC AMPS	V3- AC AMPS	V4- AC AMPS	V1- KW	V2- KW	V3- KW	V4- KW						
1106			STARTED	UNIT	CON	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED							
1109			START	UNIT	CON	START	START	START	START	START	START	START	START							
1112			START	UNIT	CON	START	START	START	START	START	START	START	START							
1113			120	121	121	121	121	121	121	121	121	121	121							
1121			NO SPIKES	OR DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION	NO DISTORTION							
1122			REMOVED	SLAVE BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES	NO BATTERIES							
1124			120	121	121	121	121	121	121	121	121	121	121							
1126			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1128			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1130			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1131			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1135			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1137			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1139			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1141			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1143			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1145			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1147			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1149			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1151			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1153			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1155			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1157			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1159			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1161			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							
1163			ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL							

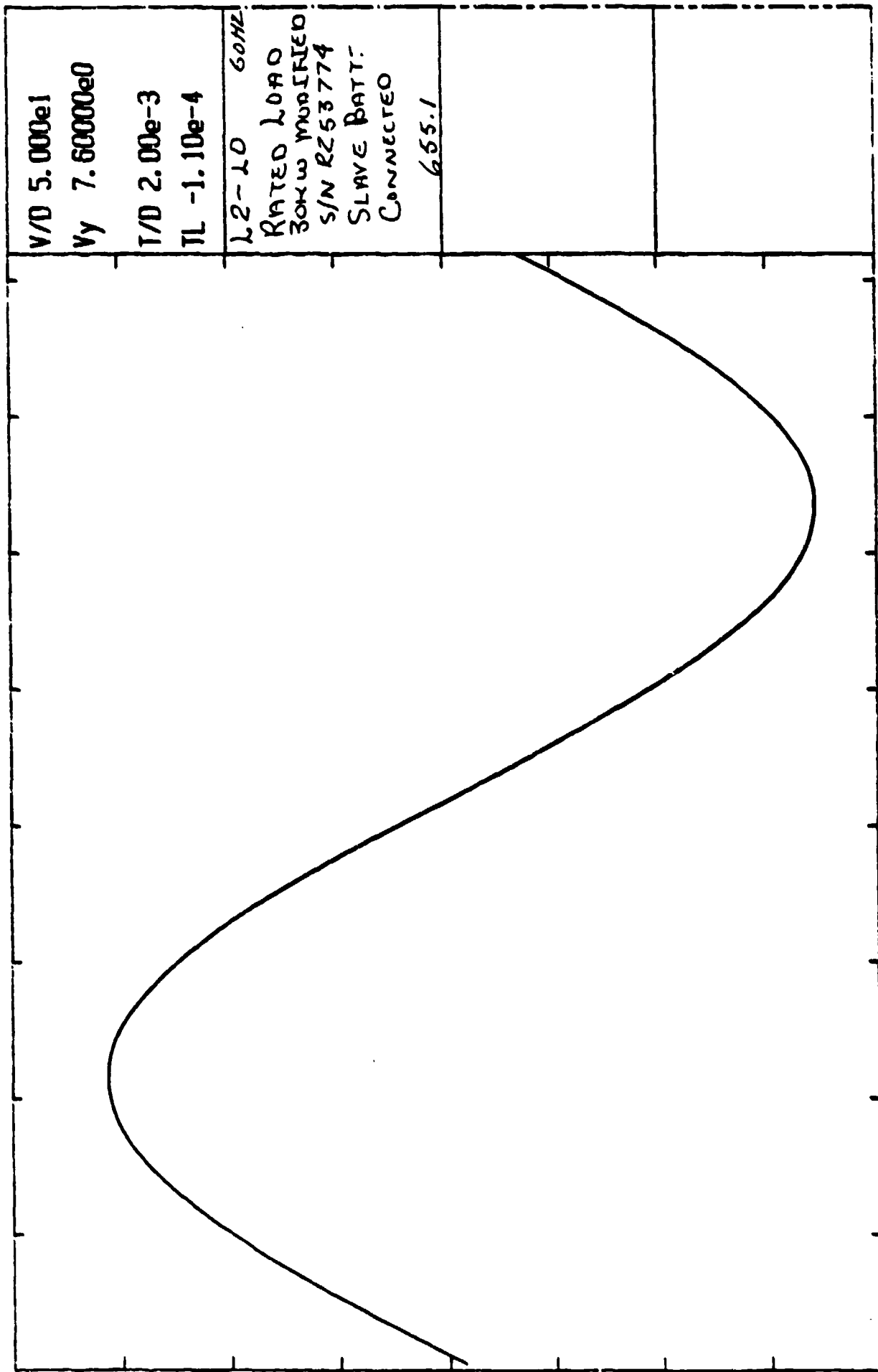
UNIT WOULD NOT START WITH REVERSE POLARITY - HEAVY ARCING OF LEADS WHEN TRYING TO CONNECT BATTERIES IN REVERSE POLARITY



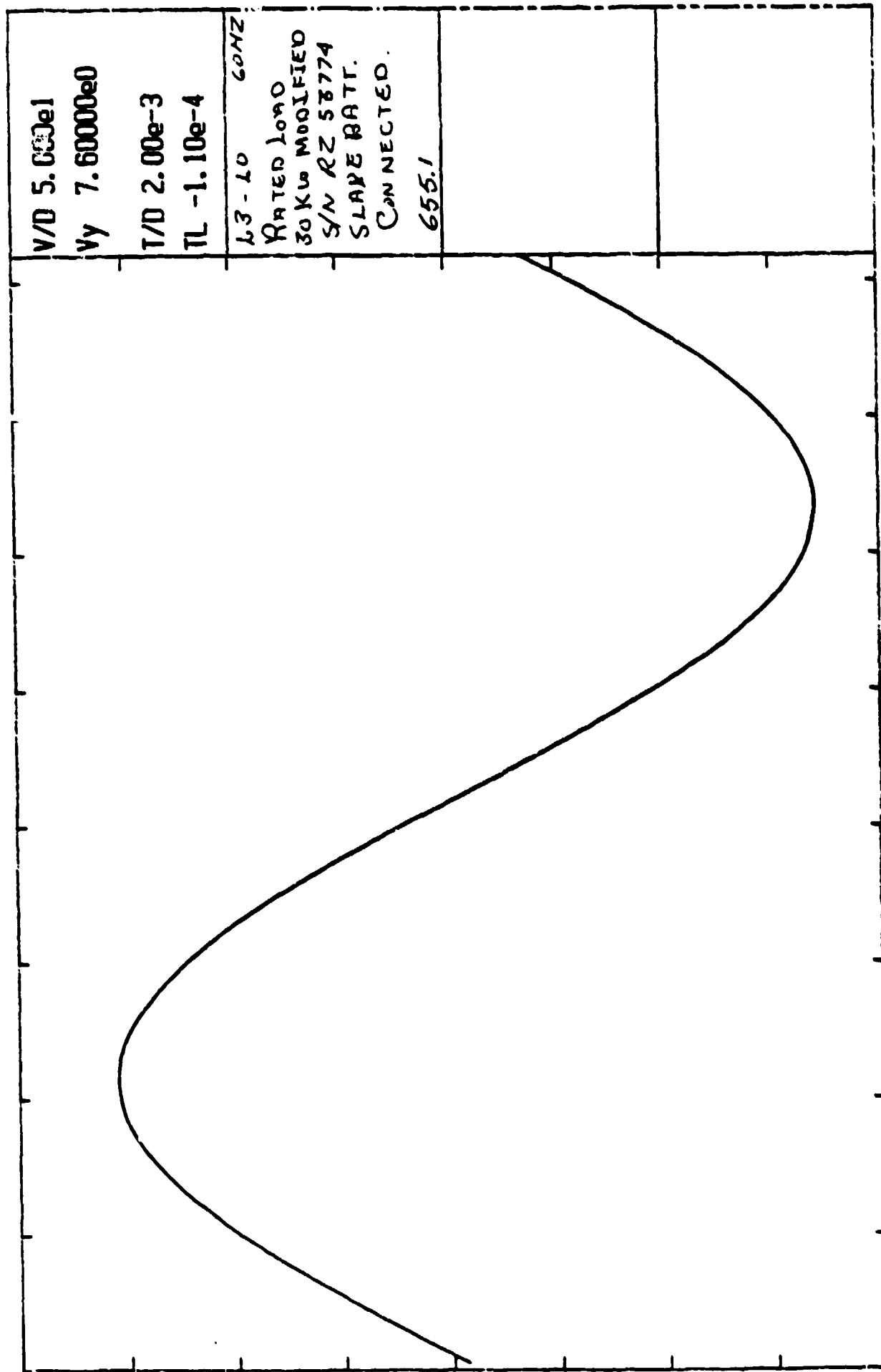
Vx

TL

B-250



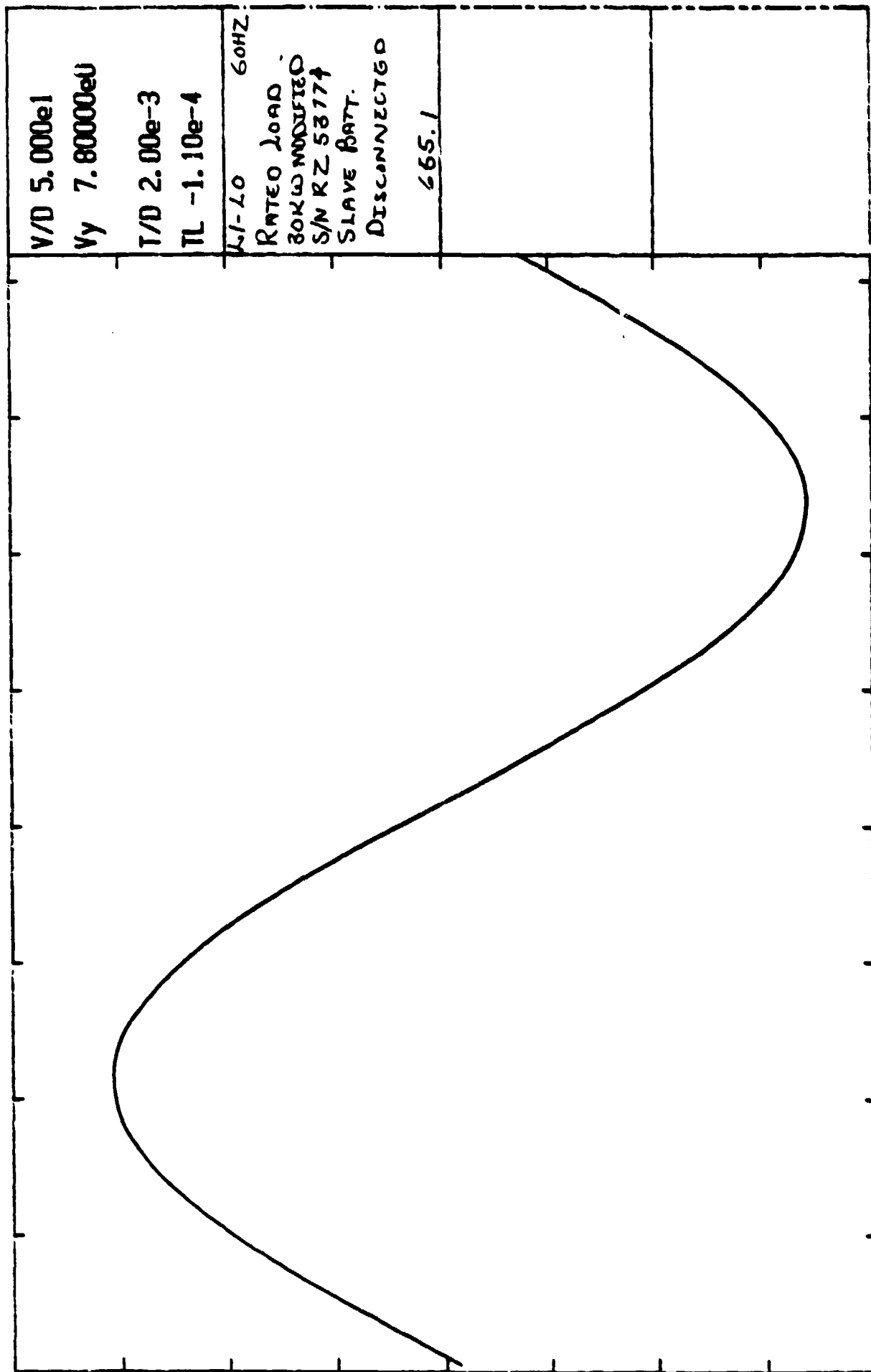
B-251



B-252

Vx

TL



B-253

V/D 5.000e1

Vy 7.80000e0

T/D 2.00e-3

TL -1.10e-4

LI-LO 60HZ

RATED LOAD

30KW MODIFIED

S/N RZ 53774

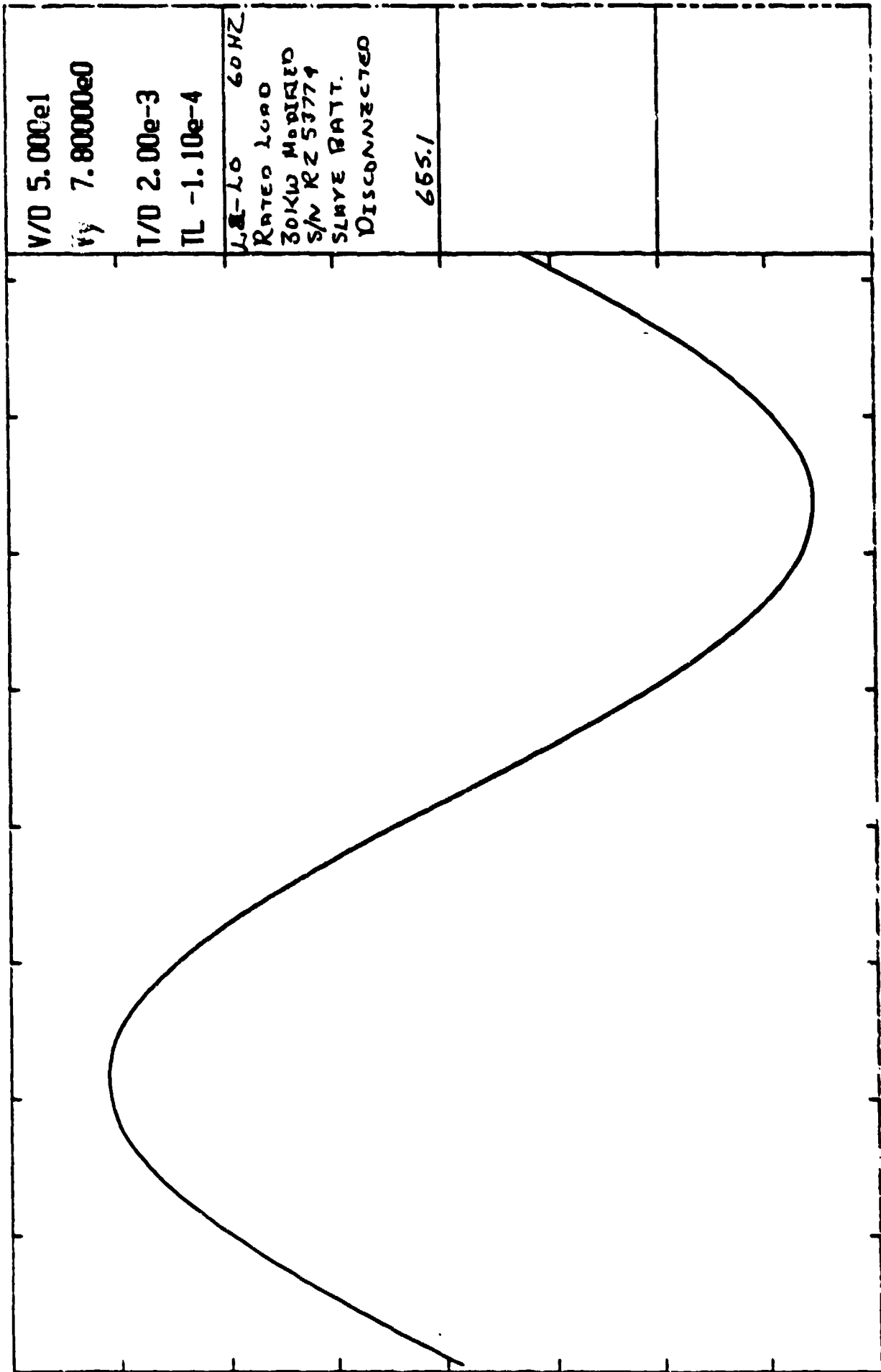
SLAVE BATT.

DISCONNECTED

665.1

Vx

TL



V/D 5.000e1
 Vy 7.80000e0
 T/D 2.00e-3
 TL -1.10e-4

LA-LO 60HZ
 RATED LOAD
 30KW MODIFIED
 S/N RZ 53774
 SLAVE BATT.
 DISCONNECTED
 655.1

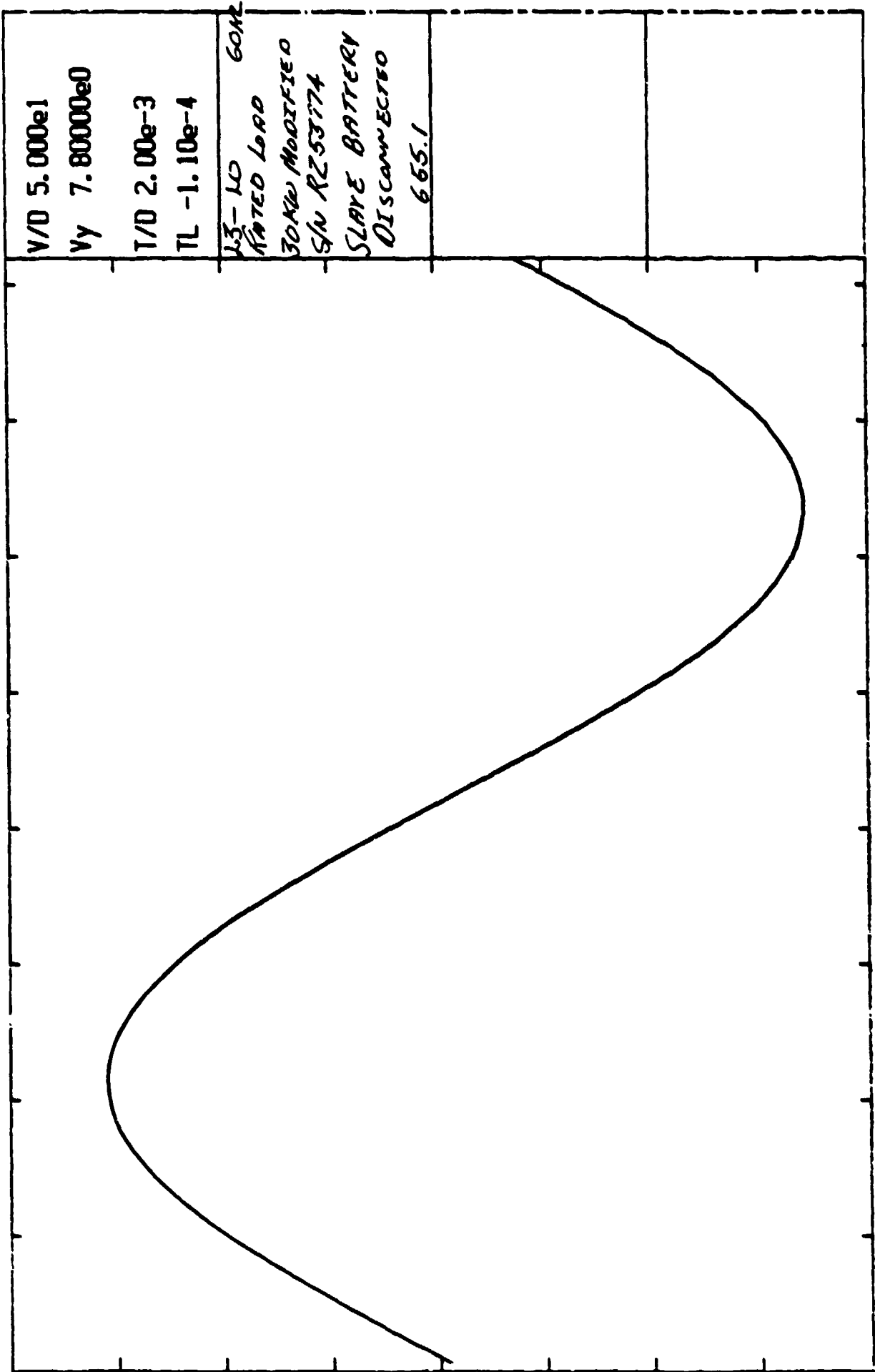
B-254

Vx

TL

yy

xx



DC CONTROL 655.1

BEGIN SCAN GROUP 1 17 NOV 87 11:05:24
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	420.09	DEG.	F	ALM
C	2	EXHAUST 2	458.14	DEG.	F	ALM
C	3	EXHAUST 3	493.18	DEG.	F	ALM
C	4	EXHAUST 4	490.83	DEG.	F	ALM
C	5	EXHAUST 5	481.95	DEG.	F	ALM
C	6	EXHAUST 6	466.63	DEG.	F	ALM
C	7	ENG. COOL. IN	187.53	DEG.	F	ALM
C	8	ENG. COOL. OUT	202.50	DEG.	F	ALM
C	9	OIL SUMP	206.36	DEG.	F	ALM
C	10	OIL GALLERY	200.20	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	130.28	DEG.	F	ALM
C	14	RAD. TOP LEFT	187.71	DEG.	F	ALM
C	15	RAD. BTM LEFT	168.87	DEG.	F	ALM
C	16	RAD. TOP RIGHT	160.30	DEG.	F	ALM
C	17	RAD. BTM RIGHT	147.09	DEG.	F	ALM
C	18	GEN. AIR IN	120.85	DEG.	F	ALM
C	19	GEN. AIR OUT	122.94	DEG.	F	ALM
C	20	GEN. FRAME TOP	117.20	DEG.	F	ALM
C	21	GEN. FRAME BTM	110.72	DEG.	F	ALM
C	22	GEN. EXCITER	128.95	DEG.	F	ALM
C	23	GEN. VOLT. REG.	102.85	DEG.	F	ALM
C	24	CONTROL PANEL	110.80	DEG.	F	ALM
C	25	RELAY AREA	129.75	DEG.	F	ALM
C	26	BATTERY LEFT	97.480	DEG.	F	ALM
C	27	BATTERY RIGHT	OPEN TC			
C	28	AIR IN SET	122.62	DEG.	F	ALM
C	29	FUEL TANK	80.267	DEG.	F	ALM
C	30	FUEL OUTLET	121.54	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 11:05:34

STOPPED SINGLE SCAN 17 NOV 87 11:05:34

BEGIN SCAN GROUP 1 17 NOV 87 11:13:59
30KW 60HZ GEN SET 5/NR25 3774

C	1	EXHAUST 1	744.84	DEG.	F	ALM
C	2	EXHAUST 2	766.53	DEG.	F	ALM
C	3	EXHAUST 3	781.61	DEG.	F	ALM
C	4	EXHAUST 4	746.19	DEG.	F	ALM
C	5	EXHAUST 5	742.52	DEG.	F	ALM
C	6	EXHAUST 6	726.33	DEG.	F	ALM
C	7	ENG. COOL. IN	186.52	DEG.	F	ALM
C	8	ENG. COOL. OUT	194.12	DEG.	F	ALM
C	9	OIL SUMP	200.93	DEG.	F	ALM
C	10	OIL GALLERY	209.74	DEG.	F	ALM
C	11		.00000			
C	12		.00000			
C	13	ENG. INTAKE	130.65	DEG.	F	ALM
C	14	RAD. TOP LEFT	140.41	DEG.	F	ALM
C	15	RAD. BTM LEFT	137.59	DEG.	F	ALM
C	16	RAD. TOP RIGHT	136.30	DEG.	F	ALM
C	17	RAD. BTM RIGHT	138.51	DEG.	F	ALM
C	18	GEN. AIR IN	121.65	DEG.	F	ALM
C	19	GEN. AIR OUT	129.34	DEG.	F	ALM
C	20	GEN. FRAME TOP	122.36	DEG.	F	ALM
C	21	GEN. FRAME BTM	118.55	DEG.	F	ALM
C	22	GEN. EXCITER	126.83	DEG.	F	ALM
C	23	GEN. VOLT. REG.	110.75	DEG.	F	ALM
C	24	CONTROL PANEL	118.75	DEG.	F	ALM
C	25	RELAY AREA	125.56	DEG.	F	ALM
C	26	BATTERY LEFT	101.20	DEG.	F	ALM
C	27	BATTERY RIGHT	OPEN TC			
C	28	AIR IN SET	123.19	DEG.	F	ALM
C	29	FUEL TANK	83.292	DEG.	F	ALM
C	30	FUEL OUTLET	132.15	DEG.	F	ALM

END SCAN GROUP 1 17 NOV 87 11:14:09

STOPPED SINGLE SCAN 17 NOV 87 11:14:09

B-256

Final Report No. FR555-2140
P.O. No. 50199
Date 29 March 1988

VOLUME IV (Part 2)

TEST DATA AND OPERATORS LOG

FOR

DIESEL ENGINE DRIVEN GENERATOR SETS
30 KW, MEP 005A AND MEP 114A

Gen Set 30 kW 400 Hz

SN RZ 40323

HIGH TEMPERATURE TEST (710.1c)

Regulator Range (511.1)	*
Frequency Adj. Range (511.2)	*
Circuit Interrupter (Short Circuit) (512.1)	✓
Circuit Interrupter (Overload Trip) (512.2)	*
Circuit Interrupter (512.3) (Overvoltage/Undervoltage)	*
Indicating Instrument (513.2)	✓
Freq. and Voltage Regulation Stab. & Trans Response (608.1)	*
Freq. and Voltage Stability (Long Term) (608.2)	*
Voltage Dip & Rise (619.2)	1
DC Control (655.1)	*
Winding Resistance (401.1a)	3
710.1.3.2h HIGH TEMP START	✓

BASELINE TESTS

SOUND LEVEL MIL STD 1474	*
FREQUENCY AND VOLTAGE REG. (608.1)	*

AMBIENT TESTS (Cont.)

PRE DROP (608.1)	*
POST DROP (608.1)	*

AMBIENT TEMPERATURE TESTS

Winding Resistance (401.1a)	3
MIL-STD-1474 Sound Level	*
Drop Test (740.3b)	✓
Max Power (640.1)	✓
Overttemperature Protective Device (515.2)	2

* FAILED TEST

1. UNEXPLAINED VOLTAGE SHIFT ON OSCILLOGRAPH DATA, DATA NOT REDUCABLE.
2. OVERTEMP SWITCH JUMPED OUT.
3. NO COMPARATIVE DATA

30 Kw 400 1/2
R2 4 0323



ACCOUNT BOOK 12 1/2 IN x 8 1/2 IN

100 PAGES	200 PAGES	300 PAGES	400 PAGES	500 PAGES	600 PAGES	700 PAGES	800 PAGES	900 PAGES	1000 PAGES
No. 875-100-J No. 875-100-DEL No. 875-100-DEL No. 875-100-DEL No. 875-100-DEL No. 875-100-DEL	No. 875-200-J No. 875-200-DEL No. 875-200-DEL No. 875-200-DEL No. 875-200-DEL No. 875-200-DEL	No. 875-300-J No. 875-300-DEL No. 875-300-DEL No. 875-300-DEL No. 875-300-DEL No. 875-300-DEL	No. 875-400-J No. 875-400-DEL No. 875-400-DEL No. 875-400-DEL No. 875-400-DEL No. 875-400-DEL	No. 875-500-J No. 875-500-DEL No. 875-500-DEL No. 875-500-DEL No. 875-500-DEL No. 875-500-DEL	No. 875-600-J No. 875-600-DEL No. 875-600-DEL No. 875-600-DEL No. 875-600-DEL No. 875-600-DEL	No. 875-700-J No. 875-700-DEL No. 875-700-DEL No. 875-700-DEL No. 875-700-DEL No. 875-700-DEL	No. 875-800-J No. 875-800-DEL No. 875-800-DEL No. 875-800-DEL No. 875-800-DEL No. 875-800-DEL	No. 875-900-J No. 875-900-DEL No. 875-900-DEL No. 875-900-DEL No. 875-900-DEL No. 875-900-DEL	No. 875-1000-J No. 875-1000-DEL No. 875-1000-DEL No. 875-1000-DEL No. 875-1000-DEL No. 875-1000-DEL

*LONG DAY SIZE 12 1/2 IN x 8 1/2 IN

BOORUM & PEASE CO. BIRMINGHAM, ALA. 35203

MADE IN U.S.A.

6-6-87 Checked water meter same OK
" " " " OK OK
" " " " Batteries OK OK
8-12-87 Hooked up Toledo Bank Running time 512.4
OK Pressure 40 Static unit a unit run
Not show wiring installation Unit shut off
Down due to overpressure control Reset overpressure
8-14-87 Pressure unit a unit shown wiring OK
Charger voltage to 240VAC
Run unit at full come
9-9-87 1059-1114 Ran same level
Test Rm 312.4- 312.7 1/2
6 OCT 1987
0850 Started unit for stabilization
For 608.1 Rm 312.9 1/2
0946 Shut unit down - unit running
Electric will not stabilize
Suspect faulty electronic common
Rm 3130.1 1/2
1045 Installed Governor
Control Box from Avonlon
Unit - NO change
Installed Governor Aquator
from motor unit - NO change
1146 Shut unit down 3130.6 1/2
7 OCT 1987
0800 Disconnected J31 Electronic
Governor Activation Mem & Set
Manual Governor Mem
0820 Started unit on manual
Governor for check out 3130.6 1/2
Shut unit down - operates
properly

2
7 OCT 1987

Hooked UNIT Back up AS A
PRECISE SET - UNIT RAN
ERRATIC

~~##~~ Checked MAG Pick-up
Position - Pick-up $\frac{3}{4}$ TURN
OFF Flywheel
Adjusted Pick-up TO
 $\frac{1}{2}$ TURN FROM Flywheel
(ABOUT PROPOSED NO PER
Ratpl ADAPL-USE)

Changed MAG Pick-up
NO D. FERENCE

Changed Load Sharing (Spare and
Modules - Erratic Running Error
Problem Solved. However,
Governor will not adjust
Proper i.e. R/L to H/L FREQ
Under shoot & H/L to R/L
FREQ Over shoot
Swapped Load sharing unit
unit & installed Load sharing
unit from 15/400 w/ Electronic
Governor - UNIT RUNS properly

8 OCT 1987

Rebuilt MAG Pick up WITH ORIGINAL.

STARTED UNIT FOR STABILIZATION

FOR 608.1 ZTM 3152.9

SHUT UNIT DOWN END OF TEST

FOR 608.1

REINSTALLED ORIGINAL LOAD SHARING
UNIT AND ADJUSTED GOVERNOR AND LOAD
SHARING UNIT. NO CHANGE

0830

0942

28 Dec 1987

Review with team 1st.

OK

22 Dec 1987

START setting unit up for June
load test.

0820

OK

Reset charge section of discharge
baffle in unit.

1050

OK

STARTED unit for June load test.
Fuel gas metering always in alarm
empty.

1200

OK

Unit unit down to remove center
section of discharge baffles.

1315

OK

STARTED unit to perform second load
test at reaction points #1, #2, #3.

1400

OK

Unit unit down end of test.

1400

OK

NOTE: Unit was down for test
at rated load with center discharge
baffle in place at reaction points #1, #2, #3.
Unit also failed with center
discharge baffles removed at rated
and at low condition at reaction #3.

14 JAN. 1988

Check voltage and under primary meters
on control panel came on after start.

But reset after reset switch is on.

0830

OK

0855

OK

START unit to check load variations
Nucleo unit on rated load. Start
fabrication for start test 600.

0900

OK

Unit shut self down on over
temp

0910

OK

Start unit to check over temp
problems. Overtemp at start test unit.

0911

OK

Alarm rated load.

NOTE

OK

Did one check of oil inside transformer unit.

14 JAN 1968

1600 START STABILIZATION FOR SHOT TESTS
609.1. *etc.*
1157 END OF TEST *etc.*
1159 SHOT UNIT DOWN *etc.*
1257 STATION UNIT NO LONG *etc.*
1258 APPLIED LOAD LONG START *etc.*
STABILIZATION FOR FREQUENCY ADJUSTMENT
CHANGE TEST. METHOD 511.2 *etc.*
1325 END OF TEST *etc.*
1326 SHOT UNIT DOWN *etc.*
1329 START UNIT ON LOAD AND START
STABILIZATION FOR RESISTANCE RANGE
TEST *etc.*
1507 END OF TEST *etc.*
1508 SHOT UNIT DOWN *etc.*
1557 START UNIT FOR RESISTANCE MEASUREMENT
TEST METHOD 513.2 *etc.*
1633 END OF TEST SHOT UNIT DOWN *etc.*
MECHANICAL MEASUREMENT TEST ABOUT
1600 *etc.*
1650 START UNIT FOR MECHANICAL MEASUREMENT
TEST METHOD 513.2 *etc.*
1717 END OF TEST SHOT UNIT DOWN *etc.*

15 JAN 1968
1608 START UNIT FOR FREQUENCY AND RESISTANCE
STABILITY TEST. METHOD 609.2 LONG
TERM. *etc.*
1639 APPLIED LOAD LONG START STABILIZATION *etc.*
1609 END OF TEST
1610 UNIT SHOT DOWN TO CORRECT FOR WINDING
RESISTANCE TEST (WITH 7500) *etc.*
1614 START UNIT APPLIED LOAD LONG *etc.*
WINDING RESISTANCE TEST STABILIZATION. *etc.*
1720 SHOT UNIT DOWN TO PERFORM
WINDING RESISTANCE TEST *etc.*

15 JAN. 1988

NOTE: DRAIN LINE TERN GOOD TEST
DIP STICK IN OIL GALLERY WALKED IT'S
WAY OUT. LATER LOSS OF 2 QUARTS OF
OIL. REPLACED OIL

16 JAN. 1988

0900 STARTED UNIT AT LOADED COND. *OK*
0901 SHUT UNIT DOWN. *OK*
0902 RESTART UNIT. *OK*
0903 APPLIED RATED LOAD. *OK*
0917 SHUT UNIT DOWN. *OK*
0927 START UNIT AT RATED COND. *OK*
0936 REDUCED TO NO LOAD. *OK*
0937 MAINTAINED COND. START CLIENT AT RATED TEST TEMP. *OK*
1007 END OF TEST SHUT UNIT DOWN. *OK*
1016 START UNIT FOR VOLTAGE AD AND
LINE TEST METHOD C19.2 *OK*
1036 SHUT UNIT DOWN. *OK*
1305 START UNIT AT RATED LOAD TO
STABILIZE FOR CLIENT INTERLUDE (overload)
TEST METHOD 572.2 *OK*
1325 SHUT UNIT DOWN. *OK*
1414 START UNIT RATED LOAD TO STABILIZE FOR
CLIENT INTERLUDE TEST. METHOD 512.2 *OK*
1500 DROP LOAD ON UNIT - METHOD 1308
END LOAD CLIENT AT TEMP. IN COMING
TO 221°F. ABOUT TEST *OK*
1511 SHUT UNIT DOWN. *OK*

18 JAN 1988

0713 STARTING TO HEAT CHAMBER FOR OVER LOAD CURRENT
512.2 CHAMBER TEMP AT 120° BECAUSE OF
OVER TEMP ON THE 16 OF JAN 1988 AS PER USE TEMP
0710 START UNIT AT RATED COND. STABILIZE
STABILIZATION *OK*
1233 END OF TEST SHUT UNIT DOWN. *OK*
1308 START UNIT FOR VOLTAGE AD & LINE
TEST METHOD C19.2 *OK*
1400 SHUT UNIT DOWN. *OK*
1453 START UNIT FOR TEST - METHOD C19.2 *OK*
1513 START STABILIZATION. *OK*
END OF TEST. *OK*

1514 SHOT UNIT DOWN

1707 STARTED UNIT FOR 512.3 CIRCUIT INTERMEDIATE

TEST OVER VOLTAGE

1723 UNIT NEVER TRIPPED END OF TEST (UNIT DID TRIP AT 158 [158 IS OUT OF SPEC])

1746 STARTED UNIT FOR CHECK OUT UNDERVOLTAGE SET UP

1750 SHOT UNIT DOWN

1751 RESTARTED UNIT

1801 END OF TEST

1841 STARTED UNIT WAS SOME ERROR, DC CIRCUIT TEST
method 655.1

1910 END OF TEST - UNIT FAILED BATTERY CONNECTION
VOLTAGE GROUND POSITION ON TEST
UNIT SHUT DOWN

19 JAN 1988

* NOTE: UNIT HAS BEEN STATIONED IN FRONT OF
ON DRIVE MEN TAMP TEST OPERATIONS. SEE
OBSERVATION UNIT IS THE SAME TEST

1910 SHOT UNIT AT LATER END

1911 SHOT UNIT DOWN TO AND AND END BARS
FOR THE SAME TEST.

1920 RESTARTED UNIT AT LATER END AND
FOR THE SAME TEST.

1940 END OF TEST START STATIONING FOR
FOR THE SAME TEST (unit)

1941 END OF TEST SHOT UNIT DOWN -
COMPLETED TEST

1942 END OF UNIT (UNIT AND END) Summary
- LATER FOR THE SAME, BATTERY DOWN, WITNESS
BATTERY DOWN, SAME TESTS AS TRYING TO
WHILE THE SAME UNIT.
DECREASE END.

* DISCUSS BATTERY PLANS BEHOLD WITH BATTERIES
COMMON USE. LEFT BATTERY DIAL WILL NOT USE ALL

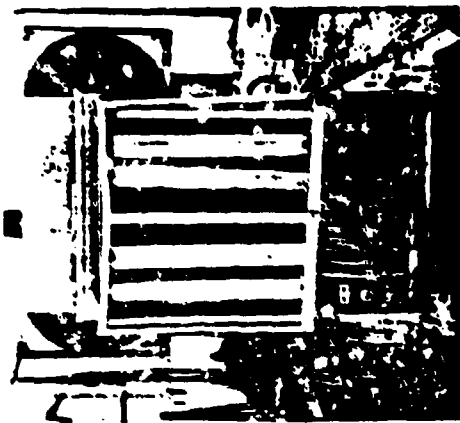


Photo shows source caused by
Over test

B-265

Dep test (cont'd) 18 Jan 1988
 Start unit above Dep test unit
 started with no problems and arrived to
 bus with no difficulty.
 - entire battery on unit for conversion
 also bus down after to 1000 hours on
 then.

ILC

ILC

121 Start unit to stabilize for test
 Dep test (cont'd) at 1000 hrs.

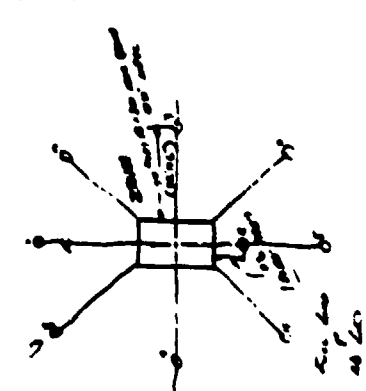
ILC

ILC

1573 End of test shut unit down.

TEST ITEM: 30kW 400Hz AC/DC 5000 30kW 400Hz AC/DC 5000 30kW 400Hz AC/DC 5000
 TEMPERATURE: 68°F MINIMUM 11,015E LEVEL 3128.4 MODIFIED
 SURFACE: GRASS SN: R240323 Hour Meter: UNMODIFIED
 BAROMETRIC PRESSURE: 29.574 SKY COVER: OVERCAST
 WIND DIRECTION: NE WIND VELOCITY: 5 mph MICROPHONE: ---
 SOUND LEVEL METER: GLA02 ACTIVE ANALYZER: ---
 LOAD CONDITION: --- RATED NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (ft.)	DBA	REMARKS
7-19-87	1059	1	22 11 1/2	86	
		2		87	
		3		82	
		4		81	
		5		84	
		6		82	
		7		82	
		8	22-11 1/2	85	
		9	2-5 1/2	78	
9-19-87					
Minimum Background Level				5000	



ACROSS THE LINE
IF SEE LINE - 100%
IF SEE LINE - 100%

TEST ITEM: Car Set SN: R240323 HOUR METER: UNMODIFIED MODIFIED
TEMPERATURE: 68° F HUMIDITY: 05% TEST SITE: AMSTERDAM

SURFACE: GRASS TERRAIN: _____
BAROMETRIC PRESSURE: 29.574 SKY COVER: OVERCAST

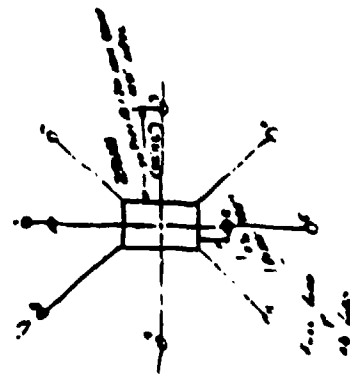
WIND DIRECTION: N/E WIND VELOCITY: 5 mph MICROPANS:
SOUND LEVEL METER: FL 1982 OZONE ANALYZER:

Sound Level Meter: ✓ Rated — No Load Microphone Location: 15 Below

Load Condition: ✓ Rated

		MICROPHONE	DISTANCE	DBA	REMARKS
2	---				

LINE	TIME	POSITION	REF (m)	
9-19-87	1102	1	22 11 1/2	87
		2		88
		3		83
		4		83
		5		86
		6		84
		7		83
		8	22-11 1/2	87
9-19-87		9	2-9 1/2	101
Maximum Depth Census level 500db				





SURFACE: GRASS TERRAIN: _____
 BAROMETRIC PRESSURE: 29.574 SKY COVER: OVERCAST
 WIND DIRECTION: NE WIND VELOCITY: 5 mph MICROPHONE: _____
 SOUND LEVEL METER: CR 982 OCTAVE ANALYZER: _____
 LOAD CONDITION: ✓ RATED — NO LOAD MICROPHONE LOCATION: 15 BELOW

A diagram of a 12-pointed star. It features a central square with a dot in the middle. Twelve lines radiate from the center to the vertices of the star. The points of the star are numbered 1 through 12 in a clockwise direction starting from the top. The points are arranged in a circular pattern around the central square.

[illegible]

ACOUSTICAL TEST DATA

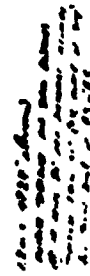
TEST ITEM: 30 KW/400 Hz GEN SET		STATION:		TIME: 1055	DATE: 22 DEC 1987
RFG/MODEL NO: MEP 114A		SERIAL NO: RZ4 0323		TEST CONDUCTED BY: KM LC	TEST ITEM OPERATOR:
TEMPERATURE: 47°F		HUMIDITY: 53%		TEST ITEM CONDITION: MODIFIED	NO LOAD
BAROMETRIC PRESSURE:		SKY COVER:		TEST SITE: HARTWOOD	SEA STATE: GRASS
29.719		OVERCAST		TERRAIN:	
WIND DIRECTION: NE		WIND VELOCITY: 5 MPH		SURFACE: GRASS	
INTERIOR: <input type="checkbox"/>		EXTERIOR: <input checked="" type="checkbox"/>		HIGHWAY DRIVING:	
MICROPHONE LOCATION:		MICROPHONE:		SOUND LEVEL METER:	
		GR 1962		GR 1982	
TAPE RECORDER:		TAPE NO:		OCTAVE ANALYZER:	
DRIVE BY:					

POSITION	DISTANCE	dBA	dBC	ALL PASS	20-20K	63	125	250	500	1,000	2,000	4,000	8,000	REMARKS
1	7M	68.1	75.0	78.1	79.2	69.6	75.8	73.0	65.6	60.9	54.2	48.1	48.7	
2	7M	69.2	75.8	79.2	80.1	68.3	72.3	73.1	65.6	62.5	55.1	51.5	49.6	
3	7M	67.4	74.1	78.3	79.9	73.9	74.4	70.1	63.4	61.6	59.0	53.9	45.1	
4	7M	69.9 79.9	75.0	78.6	79.8	72.5	72.4	72.6	64.1	61.1	58.5	54.1	46.5	
5	7M	66.9	74.2	78.5	80.1	66.4	70.5	70.5	66.1	57.1	53.2	49.8	43.0	
6	7M	68.4	76.6	80.2	81.4	67.9	72.5	71.5	64.8	60.6	57.6	52.9	48.3	
7	7M	67.0	74.5	79.8	80.6	70.5	74.8	67.8	63.6	59.3	55.3	51.0	49.9	
8	7M	67.3	74.1	78.5	80.5	70.4	71.3	70.4	64.3	60.8	55.4	43.4	42.3	
9	0.7M	81.3	88.3	92.0	93.2	81.3	82.5	81.4	76.5	72.1	71.1	67.5	65.3	

ACOUSTICAL TEST DATA

TEST ITEM:		STATION:		TIME:	DATE:	TEST ITEM OPERATOR:
30K2/400Hz Gen Set				1114	22 Dec 1987	
REF/MODEL NO:	SERIAL NO:	ODOMETER:	HOUR METER:	TEST CONDUCTED BY:		
114A	R24 0323		3134.9	K M G C		
TEMPERATURE:	HUMIDITY:	TEST SITE:		SURFACE:	SEA STATE:	TERRAIN:
47°F	53%	HACT 2200		Grass		LATED CANO
BAROMETRIC PRESSURE:	SKY COVER:	STATIONARY OPERATION:		HIGHWAY DRIVING:	DRIVE BY:	
29.719	OVERCAST					
WIND DIRECTION:	WIND VELOCITY:	MICROPHONE:		SOUND LEVEL METER:	OCTAVE ANALYZER:	
NE	< 5 MPH	GR 1962		Ge 1982		
INTERIOR:	EXTERIOR:	MICROPHONE LOCATION:		TAPE RECORDER:	TAPE NO:	

POSITION	DISTANCE	dBA	dBB	dBC	ALL PASS	3dB	6dB	125	250	500	1,000	2,000	4,000	8,000	REMARKS
1	7M	69.0	76.2	79.0	80.5	68.3	71.8	78.2	73.5	65.1	62.3	57.8	53.3	47.9	
2	7M	70.9	76.7	80.4	81.5	69.5	71.7	78.6	75.2	66.1	63.9	62.9	58.2	52.6	
3	7M	69.8	75.6	79.9	81.5	71.6	75.6	77.3	70.6	65.5	64.1	63.3	57.6	49.2	
4	7M	69.7	76.7	80.9	81.6	70.4	73.8	78.6	72.8	66.9	62.4	62.3	57.4	48.7	
5	7M	68.5	76.3	79.9	81.1	67.3	71.3	69.2	69.8	67.6	59.1	58.3	52.4	51.5	
6	7M	70.5	77.9	82.4	82.8	68.3	73.9	80.6	73.2	69.1	62.6	62.5	56.1	51.1	
7	7M	69.5	76.8	81.4	82.1	71.9	75.6	80.5	69.5	65.6	62.1	62.6	56.7	47.8	
8	7M	69.6	74.3	79.5	79.6	71.5	72.3	77.3	70.5	66.5	63.5	62.6	56.8	50.4	
9	0.7M	83.3	88.1	91.6	92.3	81.8	83.5	89.6	82.8	77.5	79.2	74.4	70.2	68.1	
#2		71.2													POSITIONS #2 + #6
#6		71.3													REMARKS: 1. dBA 10m 1m 10m



22 DEC 1987

8-274

ACOUSTICAL TEST DATA

[illegible]

TEST DATA

REF. NO. MIL-STD 705 Para. 608.1

SHEET 1 OF 2

DATE 8 OCTOBER 1987

JOB NO. 555-2140

PROJ. ENGR.

MAS

ITEM 308W, 400Hz

GENERATOR SET.

National Scientific Testing Division

Technical Services PO. Box 38

Systems Group Hattwood, Virginia 22471

Frequency and Voltage Tel: 703 752 5300

MFR. LIBBY WELDING

MODEL NO. MEP 119A

SERIAL NO. R740323

Regulation, Stability and Transient Response Test RECORDER/OBSERVER ENT/CNG.

(Short Term)

INST TIME	STEP NO.	LOAD STEP	VOLTAGE X1			AMPERES X40			KILOWATTS X40			POWER FACTOR	FREQ. Hz	EXCITER		FIELD AMPS DCA	AMB. TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 KW	L2-L0 KW	L3-L0 KW			VDC	VOLTS		
0830	START	1/4	120.0	120.5	120.0	2.60	2.62	2.65	0.245	0.250	0.250	0.80	100.1	12.9	12.9	5.38	46
0845	START	1/4	120.0	120.5	120.0	2.60	2.62	2.65	0.245	0.250	0.250	0.80	100.2	13.0	13.0	5.40	48
0855	START	1/4	120.0	120.5	120.0	2.60	2.62	2.65	0.245	0.250	0.250	0.80	100.2	13.1	13.1	5.40	50
0915	START	1/4	120.0	120.5	120.0	2.60	2.62	2.65	0.245	0.250	0.250	0.80	100.1	13.2	13.2	5.40	51
0918	STOP	1/4	120.0	120.5	120.0	2.62	2.63	2.64	0.249	0.251	0.250	0.80	100.4	13.2	13.2	5.40	
	2	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.4	9.2	9.2	3.80	
	3	4/4	120.5	120.5	120.5	2.62	2.63	2.64	0.249	0.251	0.251	0.80	100.4	13.1	13.1	5.40	
	4	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.4	9.2	9.2	3.80	
	5	4/4	120.5	120.5	120.5	2.62	2.63	2.64	0.249	0.251	0.250	0.80	100.4	13.1	13.1	5.40	
	6	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.4	9.2	9.2	3.80	
	7	4/4	120.5	120.5	120.5	2.62	2.63	2.65	0.249	0.251	0.250	0.80	100.4	13.0	13.0	5.36	
	8	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.4	9.1	9.1	3.76	
	9	3/4	121.0	121.0	120.5	1.93	1.94	1.94	0.188	0.189	0.189	0.80	100.4	12.0	12.0	4.96	
	10	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.5	9.1	9.1	3.44	
	11	3/4	121.0	121.0	120.5	1.94	1.94	1.95	0.188	0.190	0.189	0.80	100.4	12.0	12.0	4.96	
	12	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.5	9.0	9.0	3.36	
	13	3/4	121.0	121.0	120.5	1.94	1.93	1.94	0.189	0.189	0.189	0.795	100.5	11.9	11.9	4.96	
	14	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.5	9.0	9.0	3.86	
	15	2/4	121.5	121.5	121.5	1.31	1.30	1.31	0.127	0.124	0.125	0.79	100.4	10.9	10.9	4.52	
	16	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.4	9.0	9.0	3.00	
	17	2/4	121.5	121.5	121.0	1.31	1.30	1.30	0.127	0.125	0.126	0.79	100.4	10.9	10.9	4.56	
	18	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.4	9.0	9.0	3.76	
	19	2/4	121.5	121.5	121.5	1.31	1.30	1.31	0.126	0.125	0.125	0.79	100.4	10.8	10.8	4.08	
	20	0	123.0	123.0	123.0	0	0	0	0	0	0	NA	100.5	8.9	8.9	3.20	

LIMIT EXCEEDED 1.0% FOR VOLTAGE REGULATION

NOTES:

TEST DATA

REF. NO. MIL-STD 705 Para. 608.1

SHEET 2 OF 2

DATE 8 October 1987

JOB NO. 555-2140

PROJ. ENGR.



ITEM 30, 4000WZ

GENERATOR SET

National Scientific Testing Division

PO. Box 38

Haltwood, Virginia 22471

Tel: 703 752 5300

Systems

Group

Frequency and Voltage

Regulation, Stability and Transient Response Test

(Short Term) Recorder/Observer *EW/CWG*MODEL NO. *MEP 11A*SERIAL NO. *12740323*

INST TIME	STEP NO.	LOAD STEP	VOLTAGE X 1			AMPERES X 40			KILOWATTS X 40						POWER FACTOR	FREQ. Hz	EXCITER		FIELD AMPS	AMB. TEMP. °F
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	Kw	Kw	Kw			VOLTS VTC	VOLTS VTC		
			VAC	VAC	VAC	AC AMPS	AC AMPS	AC AMPS	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	9.8	9.8	1.08	
	21	1/4	122.0	122.0	123.0	0.64	0.64	0.65	0	0	0	0	0	0	NA	400.4	8.9	8.9	3.72	
	22	0	123.0	123.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	9.8	9.8	1.08	
	23	1/4	122.0	122.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.4	8.9	8.9	3.72	
	24	0	123.0	123.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.4	9.8	9.8	4.08	
	25	1/4	122.0	122.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.4	8.9	8.9	3.72	
	26	0	123.0	123.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.4	9.8	9.8	5.36	
	27	1/4	122.5	122.5	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	8.9	8.9	3.72	
	28	0	123.0	123.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	9.8	9.8	5.36	
	29	1/4	122.5	122.5	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	8.9	8.9	3.72	
	30	0	123.0	123.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	9.8	9.8	5.36	
	31	1/4	122.5	122.5	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	8.9	8.9	3.72	
	32	0	123.0	123.0	123.0	0.64	0.63	0.64	0.062	0.062	0.063	0.063	0.063	0.063	0.79	400.5	9.8	9.8	5.36	
0442		END OF TEST																		

NOTES:

TEST DATA

REF. NO. MIC STD 705; 608.1

SHEET 1 OF 3

DATE 29 FEB 1988

JOB NO. 535-2140

PROJ. ENGR.

RECORDER/OBSERVER

NAS

National Testing Division

Technical Services PO Box 30

Systems Group Hanover, Virginia 22471

FREQUENCY AND VOLTAGE INFORMATION, let 703 752 5300

STABILITY, AND TRANSMITTED RESISTANCE TEST

(SHEET 1 OF 3)

ITEM 501-11 400/112

GEN SET

UNMODIFIED

WTRP. 1100; WELDING

MODEL NO. MP 114A

SERIAL NO. R240323

LAND STEP	OVERCUT		UNDERCUT		FREQUENCY		INSTANT LOAD		INTERPATION		UNDERCUT		UNDERCUT		VOLTAGE		REG. TIME		URGENT AND	
	Hz	%	Hz	%	Hz	%	Hz	%	Hz	%	Hz	%	Hz	%	Hz	%	SEC	MIN	WET	DRY
1	2.08	.52			.45		.52	.13	0	2.5	1.04	.87					.30		0	0
2					.25		.17	.04	0	2.5					1.04	.87	.25		0	0
3					.45		.87	.22	0	2.5							.40		0	0
4	2.43	.60			.35		.87	.22	0	2.5					1.04	.87	.25		0	0
5							1.04	.26	0	2.5							.35		0	0
6	2.43	.61			.35		1.04	.26	0	2.08					1.04	.87	.30		0	0
7					.35		1.04	.26	0	2.08							.30		0	0
8	2.08	.52			.25		.87	.22	0	2.08					1.04	.87	.20		0	0
9					.45		.87	.22	.02	2.08							0		0	0
10	1.56	.35			.45		.87	.22	.02	2.08					1.04	.87	.25		0	0
11					0		1.04	.26	.02	2.08							.15		0	0
12	1.39	.25			.45		1.39	.35	.02	2.08							.25		0	0
13					.63		1.39	.35	0	2.08					1.04	.87	.25		0	0
14	1.91	.48							0	2.08					.57	.72	0		0	0

NOTES

ITEM 30 KW 400Hz

GEN SET

UNMODIFIED

REF. LIBBY WELDING

MODEL NO. MFC 114A

SERIAL NO. R2 4 0323

NAS

National Technical Systems
Scheduling Services Group
Locking (Machin)
PO Box 30
Hammond, Virginia 22471
Tel: 703 757 5300

REF. NO. MIL STD 705 608.1

SHEET 2 OF 3

DATE 29 FEB 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER

FREQUENCY AND VOLTAGE MEASUREMENT

STABILITY AND TRANSIENT RESPONSE TEST

(SEE TABLE 1)

TIME STEP	INVERTER OUTPUT		INVERTER INPUT		RECTIFICATION		IMPEDANCE		IMPEDANCE		VOLTAGE		RECT. TIME		ORIGINAL UNIT	
	Hz	W	Hz	W	Hz	W	Hz	W	Hz	W	Hz	W	SEC	W	Hz	W
14-15	.52	.13	.52	.13	.02	.125	.87	.72	.87	.72	.87	.72	.15	.0	.0	.0
15-16	.87	.22	.69	.17	.0	.125	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
16-17	.69	.17	.17	.04	.0	.166	.87	.72	.87	.72	.87	.72	.15	.0	.0	.0
17-18	.17	.04	.17	.04	.0	.166	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
18-19	.87	.22	.17	.04	.0	.125	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
19-20	.87	.22	.17	.04	.0	.125	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
20-21	.70	.17	.69	.17	.0	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
21-22	.87	.22	.87	.22	.02	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
22-23	.87	.22	.87	.22	.02	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
23-24	.87	.22	.87	.22	.02	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
24-25	.87	.22	.87	.22	.02	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
25-26	.87	.22	.87	.22	.02	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0
26-27	.87	.22	.87	.22	.02	.83	.87	.72	.87	.72	.87	.72	.0	.0	.0	.0

NOTES:

NTS

SHEET / OF /

**National
Technical
Systems
Scientific
Services
Group**

DATE 14 JAN. 1985

Tel: 703 752 5300

PROJ. ENGR.

RECORDED/OBSERVER KM/GC

Regulation, Stability and Transient Response

(Short Term)

[illegible]

NOTES:

SHORT TERM 608.1

BEGIN SCAN GROUP 1 14 JAN 88 08:16:23
30 KW 400 HZ GEN SET S/N R24 0322

C	1	EXHAUST 1	71.823	DEG.	F
C	2	EXHAUST 2	71.899	DEG.	F
C	3	EXHAUST 3	72.084	DEG.	F
C	4	EXHAUST 4	72.214	DEG.	F
C	5	EXHAUST 5	72.236	DEG.	F
C	6	EXHAUST 6	72.366	DEG.	F
C	7	ENG. COOL. IN	68.234	DEG.	F
C	8	ENG. COOL. OUT	72.305	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	71.358	DEG.	F
C	13	ENG. INTAKE	72.703	DEG.	F
C	14	RAD. TOP LEFT	77.012	DEG.	F
C	15	RAD. BTM LEFT	74.073	DEG.	F
C	16	RAD. TOP RIGHT	76.098	DEG.	F
C	17	RAD. BTM RIGHT	73.916	DEG.	F
C	18	GEN. AIR IN	73.245	DEG.	F
C	19	GEN. AIR OUT	70.940	DEG.	F
C	20	GEN. FRAME TOP	73.892	DEG.	F
C	21	GEN. FRAME BTM	70.367	DEG.	F
C	22	GEN. EXCITER	71.535	DEG.	F
C	23	GEN. VOLT. REG.	71.198	DEG.	F
C	24	CONTROL PANEL	71.198	DEG.	F
C	25	RELAY AREA	86.631	DEG.	F
C	26	BATTERY LEFT	69.122	DEG.	F
C	27	BATTERY RIGHT	69.644	DEG.	F
C	28	AIR IN SET	92.798	DEG.	F
C	29	FUEL TANK	68.163	DEG.	F
C	30	FUEL OUTLET	71.822	DEG.	F

END SCAN GROUP 1 14 JAN 88 08:16:33

STOPPED SINGLE SCAN 14 JAN 88 08:16:33

BEGIN SCAN GROUP 1 14 JAN 88 08:21:44
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	72.551	DEG.	F
C	2	EXHAUST 2	72.448	DEG.	F
C	3	EXHAUST 3	72.524	DEG.	F
C	4	EXHAUST 4	72.703	DEG.	F
C	5	EXHAUST 5	72.681	DEG.	F
C	6	EXHAUST 6	72.833	DEG.	F
C	7	ENG. COOL. IN	68.414	DEG.	F
C	8	ENG. COOL. OUT	74.168	DEG.	F
C	9	OIL SUMP	71.426	DEG.	F
C	10	OIL GALLERY	72.668	DEG.	F
C	13	ENG. INTAKE	73.470	DEG.	F
C	14	RAD. TOP LEFT	81.501	DEG.	F
C	15	RAD. BTM LEFT	78.577	DEG.	F
C	16	RAD. TOP RIGHT	83.264	DEG.	F
C	17	RAD. BTM RIGHT	80.169	DEG.	F
C	18	GEN. AIR IN	73.600	DEG.	F
C	19	GEN. AIR OUT	73.367	DEG.	F
C	20	GEN. FRAME TOP	76.280	DEG.	F
C	21	GEN. FRAME BTM	70.649	DEG.	F
C	22	GEN. EXCITER	74.811	DEG.	F
C	23	GEN. VOLT. REG.	72.461	DEG.	F
C	24	CONTROL PANEL	72.510	DEG.	F
C	25	RELAY AREA	93.199	DEG.	F
C	26	BATTERY LEFT	70.284	DEG.	F
C	27	BATTERY RIGHT	70.958	DEG.	F
C	28	AIR IN SET	87.443	DEG.	F
C	29	FUEL TANK	68.260	DEG.	F
C	30	FUEL OUTLET	74.400	DEG.	F

END SCAN GROUP 1 14 JAN 88 08:21:54

STOPPED SINGLE SCAN 14 JAN 88 08:21:54

BEGIN SCAN GROUP 1 14 JAN 88 09:00:00
30 KW 400 HZ GEN SET S/N R24 0322

C	1	EXHAUST 1	783.00	DEG.	F
C	2	EXHAUST 2	828.37	DEG.	F
C	3	EXHAUST 3	825.03	DEG.	F
C	4	EXHAUST 4	830.22	DEG.	F
C	5	EXHAUST 5	833.96	DEG.	F
C	6	EXHAUST 6	769.49	DEG.	F
C	7	ENG. COOL. IN	197.45	DEG.	F
C	8	ENG. COOL. OUT	204.32	DEG.	F
C	9	OIL SUMP	221.47	DEG.	F
C	10	OIL GALLERY	224.55	DEG.	F
C	13	ENG. INTAKE	134.61	DEG.	F
C	14	RAD. TOP LEFT	149.68	DEG.	F
C	15	RAD. BTM LEFT	147.42	DEG.	F
C	16	RAD. TOP RIGHT	143.76	DEG.	F
C	17	RAD. BTM RIGHT	146.13	DEG.	F
C	18	GEN. AIR IN	124.06	DEG.	F
C	19	GEN. AIR OUT	146.99	DEG.	F
C	20	GEN. FRAME TOP	130.42	DEG.	F
C	21	GEN. FRAME BTM	129.91	DEG.	F
C	22	GEN. EXCITER	134.85	DEG.	F
C	23	GEN. VOLT. REG.	117.88	DEG.	F
C	24	CONTROL PANEL	120.01	DEG.	F
C	25	RELAY AREA	117.24	DEG.	F
C	26	BATTERY LEFT	119.38	DEG.	F
C	27	BATTERY RIGHT	115.41	DEG.	F
C	28	AIR IN SET	125.96	DEG.	F
C	29	FUEL TANK	76.579	DEG.	F
C	30	FUEL OUTLET	130.64	DEG.	F

END SCAN GROUP 1 14 JAN 88 09:00:10

STOPPED SINGLE SCAN 14 JAN 88 09:00:10

BEGIN SCAN GROUP 1 14 JAN 88 09:10:00
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	686.92	DEG.	F
C	2	EXHAUST 2	717.50	DEG.	F
C	3	EXHAUST 3	719.07	DEG.	F
C	4	EXHAUST 4	726.18	DEG.	F
C	5	EXHAUST 5	733.79	DEG.	F
C	6	EXHAUST 6	676.43	DEG.	F
C	7	ENG. COOL. IN	204.82	DEG.	F
C	8	ENG. COOL. OUT	212.90	DEG.	F
C	9	OIL SUMP	237.72	DEG.	F
C	10	OIL GALLERY	238.43	DEG.	F
C	13	ENG. INTAKE	136.79	DEG.	F
C	14	RAD. TOP LEFT	155.62	DEG.	F
C	15	RAD. BTM LEFT	152.56	DEG.	F
C	16	RAD. TOP RIGHT	149.54	DEG.	F
C	17	RAD. BTM RIGHT	151.30	DEG.	F
C	18	GEN. AIR IN	122.59	DEG.	F
C	19	GEN. AIR OUT	154.53	DEG.	F
C	20	GEN. FRAME TOP	130.73	DEG.	F
C	21	GEN. FRAME BTM	134.49	DEG.	F
C	22	GEN. EXCITER	137.67	DEG.	F
C	23	GEN. VOLT. REG.	124.64	DEG.	F
C	24	CONTROL PANEL	128.83	DEG.	F
C	25	RELAY AREA	119.86	DEG.	F
C	26	BATTERY LEFT	126.62	DEG.	F
C	27	BATTERY RIGHT	122.56	DEG.	F
C	28	AIR IN SET	124.56	DEG.	F
C	29	FUEL TANK	80.250	DEG.	F
C	30	FUEL OUTLET	127.75	DEG.	F

END SCAN GROUP 1 14 JAN 88 09:10:10

STOPPED SINGLE SCAN 14 JAN 88 09:10:10

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

TEST DATA

REF. NO. MIL-STD 705 Para. 608.1

SHEET 1 OF 2

DATE 14 JAN 1983

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER CM/CE

MTS

ITEM 30 KW 1400 Hz

EXPERIMENT SET

MODIFIED

MFR. CRYSTAL WELDING

MODEL NO. 1124 114A

SERIAL NO. 124 0323

National Technical Systems
Scientific Services Group
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

Frequency and Voltage

Regulation, Stability and Transient Response Test

(Short Term)

INST. TIME	STEP NO.	LOAD STEP	E 6000 0 VOLTAGE			E 6000 0 AMPERES			E 6000 0 KILOWATTS			E 6000 0 POWER	E 6000 0 FREQ.	E 6000 0 EXCITER FIELD		E 6000 0 AMB. TEMP.	E 6000 0 GUN
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0			VOLTS	AMPS		
			VAC	VAC	VAC	AC RMS	AC RMS	AC RMS	RW	RW	RW	PF	Hz	VDC	DCA	°F	IN/OUT
1	1	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.7	5.9	120	27/37.5
2	2	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
3	3	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
4	4	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	120	27/37.5
5	5	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
6	6	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
7	7	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
8	8	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
9	9	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
10	10	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
11	11	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
12	12	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
13	13	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
14	14	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
15	15	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
16	16	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
17	17	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
18	18	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
19	19	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
20	20	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5
21	21	NIL	121.5	121.5	121.5	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	27/37.5

NOTES:

REF. NO. MIL-STD 705 Para. 608.1

SHEET 2 OF 2

DATE 14 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

Testing Division
P.O. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

National Technical Systems
Scientific Services Group
Frequency and Voltage

Regulation, Stability and Transient Response Test RECORDER/OBSERVER KM/GC

TEST DATA

ITEM 30 Kw / 400 Hz

GENERATOR SET
MODIFIED

MEGR. LIBBY WELDING

MODEL NO. MGP 114A

SERIAL NO. R24 0323

(Short Term)

INST TIME	STEP NO.	LOAD STEP	E 6023 0 VOLTAGE						E 6040 0 AMPERES x 40						E 6030 0 KILOWATTS x 40						POWER FACTOR	FREQ. Hz	E 6060 0 EXCITER FIELD		AMB. TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw	VOLTS VDC	AMPS DCA									
D-284	22	NIL	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.6	11.1	4.0	126			
	23	Y4	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.7	12.0	4.0	125			
	24	NIL	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.7	11.0	4.0	125			
	25	Y4	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.5	12.0	4.0	125			
	26	NIL	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.5	11.0	4.0	124			
	27	NIL	120	120.5	120	.64	.65	.65				.062	.063	.062				.80	400.6	11.1	4.0	125			
	28	NIL	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.7	15.8	5.75	124			
	29	NIL	120	120.5	120	.64	.65	.65				.062	.063	.062				.80	400.6	11.2	4.0	124			
	30	NIL	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062				.80	400.7	15.8	5.75	125			
	31	NIL	120	120.5	120	.64	.65	.65				.062	.063	.062				.80	400.6	11.2	4.0	125			
1157	32	NIL	121.5	121.5	121.5	.64	.65	.65				.062	.063	.062					400.6	11.2	4.0	125			
1159			END OF TEST																						
			SHUT DOWN																						

NOTES:

TEST DATA

NDS

REF. NO. MK 570 705

SHEET 1 OF 3

DATE 2 FEB 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER RJ

National Scientific Testing Division

PO Box 30

Hartwood, Virginia 22471

Tel: 703 757 5300

Scholastic Services Group

National Technical Systems

FREQUENCY AND VOLTAGE REGULATION, AND TRANSIENT RESPONSE TEST

(SHORT TEST)

ITEM 30 KW 400 Hz

GEN SET

MODIFIED

REGR. LIBBY WELDON

MODEL NO. MRP 114A

SERIAL NO. R240323

VOLTAGE

FREQUENCY

LOAD STEP	MAXIMUM EXCURSION		UNDERSHOOT		REC. TIME SEC	CONSTANT LOAD		REC. TIME SEC	UNDERSHOOT		MAXIMUM EXCURSION		UNDERSHOOT		CONSTANT LOAD	
	OVERCUT Hz	%	Hz	%		Hz	%		Hz	%	WATT	%	WATT	%	WATT	%
1	2.40	.60			.31	.17	.04	.05	1.25	1.56	1.30	1.24	1.45	.17	.15	
2			1.56	.32	.31	.26	.07	0	1.16					.17	.15	
3					.31	.26	.07	.075	1.16	1.56	1.30			.17	.15	
4	2.43	.60			.31	.26	.07	.05	1.25	1.74	1.45	1.74	1.45	.17	.15	
5			1.91	.48	.31	.35	.09	0	1.25	1.74	1.45			.17	.15	
6	2.43	.60			.31	.26	.07	.1	1.25			1.91	1.59	.17	.15	
7			1.24	.43	.23	.17	.04	.075	1.25	1.39	1.16			.17	.15	
8	2.60	.65			.23	.17	.04	0	.83			1.22	1.01	.17	.15	
9			.69	.17	0	.17	.04	.025	.83	.87	.72			.17	.15	
10	1.04	.26			0	.26	.07	.025	.83			1.56	1.30	.17	.15	
10-11			.87	.22	0	.17	.04	0	0	1.04	.87			.17	.15	
11					0	.17	.04	0	0					.17	.15	
11-12	1.04	.26			0	.17	.04	.025	0			1.22	1.01	.17	.15	
12			.69	.17	0	.17	.04	.025	0					.17	.15	
12-13					0	.17	.04	0	.83	1.04	.87			.17	.15	
13					0	.17	.04	0	.83	1.04	.87			.17	.15	
13-14	1.04	.26			0	.17	.04	0	.83	1.04	.87			.17	.15	

VOLTAGE REGULATION EXCEEDED 1%

NOTES:

TEST DATA

ITEM 30 Kw / 400 Hz
Tested Set
Manufacturer
 MFR. LIABY WELDING
 MODEL NO. MEP 114A
 SERIAL NO. R24 0323

NAS
 National Technical Systems
 Scientific Services Group
 Testing Division
 P.O. Box 38
 Hailwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. MIL-STD 705
 SHEET 1 OF 3
 DATE 15 JAN 1988
 JOB NO. 555-2140
 PROJ. ENGR. _____
 RECORDER/OBSERVER KA/C

WINDING RESISTANCE

WINDING

INST TIME	STEP NO.	LOAD STEP	E-6083 VOLTAGE			E-6040 0 AMPERES x10			E-6230 0 KILOWATTS x10			E12520 POWER FACTOR	E6040 FREQ. Hz	E61670 EXCITER FIELD		E6040 TEMP. °F	E6040 IN UNIT
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC RMS	L2-L0 AC RMS	L3-L0 AC RMS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw			VOLTS VDC	AMPS DCA		
11:44			START	CONT	ADJUST	2.61	2.61	2.61	2.0	5.75	17.6	.80	400.8	17.6	5.3	126	13.3
11:45		RL	119	120	119.5	2.59	2.61	2.61	.249	.25	.25	.80	400.5	17.6	5.75	126	13.3
11:46		RL	119	120	119.5	2.59	2.61	2.61	.249	.25	.25	.80	400.7	17.8	5.75	123	13.3
11:47		RL	119	120	119.5	2.59	2.61	2.61	.249	.25	.25	.80	400.7	18.0	5.75	124	13.3
11:48		START	CONT	ADJUST	ADJUST	2.61	2.61	2.61	2.0	5.75	17.6	.80	400.8	17.6	5.3	126	13.3

B-286

NOTES:

11

TEST DATA

ITEM 30 Kw / 400 Hz
 OPERATOR SET
 MODIFIER
 REGR. LARRY WILSON
 MODEL NO. 1144
 SERIAL NO. P24 0323

NTS

National Technical Systems
 Schenck Services Group
 Testing Division
 PO Box 38
 Hatwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. MLC 500 225
 SHEET 2 OF 3
 DATE 15 JAN 1968
 JOB NO. 535-2146
 PROJ. ENGR.
 RECORDER/OBSERVER KM/6C

WINDING RESISTANCE TEST

TEST READ IN WTS	TIME HRS	62-10 DIAL READING	MULTIPLIER	LEAD RESISTANCE	WINDING RESIS. OBS	WINDING	WINDING CURR TO 252	RESIS.	AVG. WINDING TEMP.
720		62.2	10 ⁻³	0000	.0527	1		.0478	125°F
		52.1	10 ⁻³		.0521	2		.0472	51.6°C
		51.6	10 ⁻³		.0516	3		.0468	
		51.7	10 ⁻³		.0517	7		.0464	
		44.2	10 ⁻³		.0492	8		.0446	
		44.2	10 ⁻³		.0492	9		.0446	
		2.5	1		2.8	F1		2.54	
		52.1	10 ⁻³		.0521	1		.0472	
		51.2	10 ⁻³		.0512	2		.0464	
		51.2	10 ⁻³		.0512	3		.0464	
		51.7	10 ⁻³		.0517	7		.0464	
		44.3	10 ⁻³		.0493	8		.0447	
		44.1	10 ⁻³		.0491	9		.0445	
		2.7	1		2.7	F1		2.45	
		52.1	10 ⁻³		.0521	1		.0472	
		51.3	10 ⁻³		.0513	2		.0465	
		51.2	10 ⁻³		.0512	3		.0464	
		51.6	10 ⁻³		.0516	7		.0468	
		44.2	10 ⁻³		.0492	8		.0446	
		44.1	10 ⁻³		.0491	9		.0445	
		2.7	1		2.7	F1		2.45	
		52.2	10 ⁻³		.0522	1		.0474	
		51.3	10 ⁻³		.0513	2		.0465	
		51.2	10 ⁻³		.0512	3		.0464	
		51.5	10 ⁻³		.0515	7		.0467	
		44.1	10 ⁻³		.0491	8		.0445	
		44.2	10 ⁻³		.0492	9		.0446	

OTES:

TEST DATA



TEST 30 KW / 400 Hz

CONVERTOR SET

11/01/77

REGR. LABBY WELDON

MODEL NO. N180 1144

REF. NO. MLC STD 705

SHEET 3 OF 3

DATE 15 JAN. 1988

JOB NO. 555-2146

PROJ. ENGR.

RECORDER/OBSERVER KM/GC

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

WINDING RESISTANCE TEST

TEST LEAD NO. BITS	TIME HRS	602470 DIAL READING	MULTIPLIER	LEAD RESISTANCE	WINDING RESIS. OHMS	WINDING	WINDING CORR TO 60° ± 2.5°	RESIS. CORR TO 60° ± 2.5°	AVG. AMBIENT TEMP.
		2.7	1	0.000	2.7	21		2.45	125.2
		52.5	10-3		.0525	1		.0476	
		51.4	10-3		.0514	2		.0466	
		57.1	10-3		.0571	3		.0464	
		51.5	10-3		.0515	7		.0467	
		48.3	10-3		.0483	8		.0446	
		43.1	10-3		.0431	9		.0445	
		2.7	1		2.7	21		2.45	
		53.1	10-3		.0531	1		.0472	
		57.3	10-3		.0573	2		.0465	
		57.1	10-3		.0571	3		.0464	
		57.4	10-3		.0574	7		.0466	
		43.0	10-3		.0430	8		.0444	
		47.9	10-3		.0479	9		.0443	
		2.7	1		2.7	21		2.45	

8-289

NOTES:

BEGIN SCAN GROUP 1 15 JAN 88 16:04:55
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	459.40	DEG.	F
C	2	EXHAUST 2	520.52	DEG.	F
C	3	EXHAUST 3	523.30	DEG.	F
C	4	EXHAUST 4	528.43	DEG.	F
C	5	EXHAUST 5	532.74	DEG.	F
C	6	EXHAUST 6	472.98	DEG.	F
C	7	ENG. COOL. IN	186.46	DEG.	F
C	8	ENG. COOL. OUT	193.14	DEG.	F
C	9	OIL SUMP	176.44	DEG.	F
C	10	OIL GALLERY	224.32	DEG.	F
C	13	ENG. INTAKE	130.72	DEG.	F
C	14	RAD. TOP LEFT	143.63	DEG.	F
C	15	RAD. BTM LEFT	141.23	DEG.	F
C	16	RAD. TOP RIGHT	145.45	DEG.	F
C	17	RAD. BTM RIGHT	146.12	DEG.	F
C	18	GEN. AIR IN	122.38	DEG.	F
C	19	GEN. AIR OUT	156.27	DEG.	F
C	20	GEN. FRAME TOP	131.07	DEG.	F
C	21	GEN. FRAME BTM	135.65	DEG.	F
C	22	GEN. EXCITER	137.92	DEG.	F
C	23	GEN. VOLT. REG.	133.71	DEG.	F
C	24	CONTROL PANEL	136.06	DEG.	F
C	25	RELAY AREA	120.57	DEG.	F
C	26	BATTERY LEFT	139.48	DEG.	F
C	27	BATTERY RIGHT	139.04	DEG.	F
C	28	AIR IN SET	123.88	DEG.	F
C	29	FUEL TANK	129.85	DEG.	F
C	30	FUEL OUTLET	146.52	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:05:05

STOPPED SINGLE SCAN 15 JAN 88 16:05:05

BEGIN SCAN GROUP 1 15 JAN 88 16:05:43
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	739.36	DEG.	F
C	2	EXHAUST 2	776.73	DEG.	F
C	3	EXHAUST 3	789.13	DEG.	F
C	4	EXHAUST 4	785.63	DEG.	F
C	5	EXHAUST 5	796.94	DEG.	F
C	6	EXHAUST 6	741.50	DEG.	F
C	7	ENG. COOL. IN	189.84	DEG.	F
C	8	ENG. COOL. OUT	196.42	DEG.	F
C	9	OIL SUMP	159.10	DEG.	F
C	10	OIL GALLERY	225.97	DEG.	F
C	13	ENG. INTAKE	131.45	DEG.	F
C	14	RAD. TOP LEFT	144.56	DEG.	F
C	15	RAD. BTM LEFT	142.71	DEG.	F
C	16	RAD. TOP RIGHT	146.04	DEG.	F
C	17	RAD. BTM RIGHT	146.97	DEG.	F
C	18	GEN. AIR IN	123.38	DEG.	F
C	19	GEN. AIR OUT	157.07	DEG.	F
C	20	GEN. FRAME TOP	130.94	DEG.	F
C	21	GEN. FRAME BTM	135.47	DEG.	F
C	22	GEN. EXCITER	137.79	DEG.	F
C	23	GEN. VOLT. REG.	133.68	DEG.	F
C	24	CONTROL PANEL	136.63	DEG.	F
C	25	RELAY AREA	120.66	DEG.	F
C	26	BATTERY LEFT	138.99	DEG.	F
C	27	BATTERY RIGHT	139.50	DEG.	F
C	28	AIR IN SET	124.49	DEG.	F
C	29	FUEL TANK	129.95	DEG.	F
C	30	FUEL OUTLET	147.57	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:05:52

STOPPED SINGLE SCAN 15 JAN 88 16:05:52

BEGIN SCAN GROUP 1 15 JAN 88 16:06:31
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	445.55	DEG.	F
C	2	EXHAUST 2	516.00	DEG.	F
C	3	EXHAUST 3	510.60	DEG.	F
C	4	EXHAUST 4	512.34	DEG.	F
C	5	EXHAUST 5	525.86	DEG.	F
C	6	EXHAUST 6	459.37	DEG.	F
C	7	ENG. COOL. IN	190.45	DEG.	F
C	8	ENG. COOL. OUT	195.74	DEG.	F
C	9	OIL SUMP	173.01	DEG.	F
C	10	OIL GALLERY	226.70	DEG.	F
C	13	ENG. INTAKE	131.09	DEG.	F
C	14	RAD. TOP LEFT	144.60	DEG.	F
C	15	RAD. BTM LEFT	142.18	DEG.	F
C	16	RAD. TOP RIGHT	146.61	DEG.	F
C	17	RAD. BTM RIGHT	147.76	DEG.	F
C	18	GEN. AIR IN	123.04	DEG.	F
C	19	GEN. AIR OUT	156.71	DEG.	F
C	20	GEN. FRAME TOP	131.16	DEG.	F
C	21	GEN. FRAME BTM	135.01	DEG.	F
C	22	GEN. EXCITER	138.61	DEG.	F
C	23	GEN. VOLT. REG.	134.14	DEG.	F
C	24	CONTROL PANEL	136.94	DEG.	F
C	25	RELAY AREA	120.86	DEG.	F
C	26	BATTERY LEFT	138.46	DEG.	F
C	27	BATTERY RIGHT	139.52	DEG.	F
C	28	AIR IN SET	125.46	DEG.	F
C	29	FUEL TANK	129.92	DEG.	F
C	30	FUEL OUTLET	145.96	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:06:41

STOPPED SINGLE SCAN 15 JAN 88 16:06:41

BEGIN SCAN GROUP 1 15 JAN 88 16:07:13
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	738.08	DEG.	F
C	2	EXHAUST 2	774.37	DEG.	F
C	3	EXHAUST 3	790.51	DEG.	F
C	4	EXHAUST 4	783.86	DEG.	F
C	5	EXHAUST 5	798.61	DEG.	F
C	6	EXHAUST 6	741.71	DEG.	F
C	7	ENG. COOL. IN	191.13	DEG.	F
C	8	ENG. COOL. OUT	197.85	DEG.	F
C	9	OIL SUMP	168.30	DEG.	F
C	10	OIL GALLERY	227.13	DEG.	F
C	13	ENG. INTAKE	131.00	DEG.	F
C	14	RAD. TOP LEFT	145.82	DEG.	F
C	15	RAD. BTM LEFT	143.62	DEG.	F
C	16	RAD. TOP RIGHT	146.53	DEG.	F
C	17	RAD. BTM RIGHT	147.75	DEG.	F
C	18	GEN. AIR IN	122.81	DEG.	F
C	19	GEN. AIR OUT	157.34	DEG.	F
C	20	GEN. FRAME TOP	130.96	DEG.	F
C	21	GEN. FRAME BTM	135.63	DEG.	F
C	22	GEN. EXCITER	138.82	DEG.	F
C	23	GEN. VOLT. REG.	133.82	DEG.	F
C	24	CONTROL PANEL	136.67	DEG.	F
C	25	RELAY AREA	120.80	DEG.	F
C	26	BATTERY LEFT	139.03	DEG.	F
C	27	BATTERY RIGHT	139.56	DEG.	F
C	28	AIR IN SET	124.48	DEG.	F
C	29	FUEL TANK	129.89	DEG.	F
C	30	FUEL OUTLET	146.73	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:07:25

STOPPED SINGLE SCAN 15 JAN 88 16:07:25

BEGIN SCAN GROUP 1 15 JAN 88 15:30:09
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	377.21	DEG.	F
C	2	EXHAUST 2	443.51	DEG.	F
C	3	EXHAUST 3	441.38	DEG.	F
C	4	EXHAUST 4	444.13	DEG.	F
C	5	EXHAUST 5	443.07	DEG.	F
C	6	EXHAUST 6	375.16	DEG.	F
C	7	ENG. COOL. IN	182.23	DEG.	F
C	8	ENG. COOL. OUT	188.46	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	223.81	DEG.	F
C	13	ENG. INTAKE	132.91	DEG.	F
C	14	RAD. TOP LEFT	143.61	DEG.	F
C	15	RAD. BTM LEFT	141.67	DEG.	F
C	16	RAD. TOP RIGHT	145.34	DEG.	F
C	17	RAD. BTM RIGHT	146.17	DEG.	F
C	18	GEN. AIR IN	125.30	DEG.	F
C	19	GEN. AIR OUT	156.42	DEG.	F
C	20	GEN. FRAME TOP	132.09	DEG.	F
C	21	GEN. FRAME BTM	136.52	DEG.	F
C	22	GEN. EXCITER	139.43	DEG.	F
C	23	GEN. VOLT. REG.	133.65	DEG.	F
C	24	CONTROL PANEL	136.28	DEG.	F
C	25	RELAY AREA	120.29	DEG.	F
C	26	BATTERY LEFT	138.79	DEG.	F
C	27	BATTERY RIGHT	139.48	DEG.	F
C	28	AIR IN SET	126.82	DEG.	F
C	29	FUEL TANK	129.91	DEG.	F
C	30	FUEL OUTLET	146.60	DEG.	F

END SCAN GROUP 1 15 JAN 88 15:30:19

STOPPED SINGLE SCAN 15 JAN 88 15:30:24

BEGIN SCAN GROUP 1 15 JAN 88 16:00:11
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	379.47	DEG.	F
C	2	EXHAUST 2	445.11	DEG.	F
C	3	EXHAUST 3	440.85	DEG.	F
C	4	EXHAUST 4	442.25	DEG.	F
C	5	EXHAUST 5	444.13	DEG.	F
C	6	EXHAUST 6	375.83	DEG.	F
C	7	ENG. COOL. IN	181.92	DEG.	F
C	8	ENG. COOL. OUT	187.98	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	223.85	DEG.	F
C	13	ENG. INTAKE	131.98	DEG.	F
C	14	RAD. TOP LEFT	142.26	DEG.	F
C	15	RAD. BTM LEFT	140.46	DEG.	F
C	16	RAD. TOP RIGHT	145.46	DEG.	F
C	17	RAD. BTM RIGHT	145.37	DEG.	F
C	18	GEN. AIR IN	123.18	DEG.	F
C	19	GEN. AIR OUT	155.64	DEG.	F
C	20	GEN. FRAME TOP	131.40	DEG.	F
C	21	GEN. FRAME BTM	136.05	DEG.	F
C	22	GEN. EXCITER	138.89	DEG.	F
C	23	GEN. VOLT. REG.	133.75	DEG.	F
C	24	CONTROL PANEL	136.75	DEG.	F
C	25	RELAY AREA	120.64	DEG.	F
C	26	BATTERY LEFT	139.08	DEG.	F
C	27	BATTERY RIGHT	139.49	DEG.	F
C	28	AIR IN SET	124.90	DEG.	F
C	29	FUEL TANK	129.99	DEG.	F
C	30	FUEL OUTLET	146.28	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:00:20

STOPPED SINGLE SCAN 15 JAN 88 16:00:20

BEGIN SCAN GROUP 1 15 JAN 88 16:03:12
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	383.08	DEG.	F
C	2	EXHAUST 2	444.01	DEG.	F
C	3	EXHAUST 3	441.51	DEG.	F
C	4	EXHAUST 4	445.43	DEG.	F
C	5	EXHAUST 5	447.43	DEG.	F
C	6	EXHAUST 6	383.87	DEG.	F
C	7	ENG. COOL. IN	188.93	DEG.	F
C	8	ENG. COOL. OUT	187.67	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	223.06	DEG.	F
C	13	ENG. INTAKE	130.46	DEG.	F
C	14	RAD. TOP LEFT	141.98	DEG.	F
C	15	RAD. BTM LEFT	140.27	DEG.	F
C	16	RAD. TOP RIGHT	143.83	DEG.	F
C	17	RAD. BTM RIGHT	144.57	DEG.	F
C	18	GEN. AIR IN	122.95	DEG.	F
C	19	GEN. AIR OUT	155.71	DEG.	F
C	20	GEN. FRAME TOP	130.27	DEG.	F
C	21	GEN. FRAME BTM	136.11	DEG.	F
C	22	GEN. EXCITER	137.12	DEG.	F
C	23	GEN. VOLT. REG.	133.30	DEG.	F
C	24	CONTROL PANEL	136.37	DEG.	F
C	25	RELAY AREA	120.57	DEG.	F
C	26	BATTERY LEFT	139.50	DEG.	F
C	27	BATTERY RIGHT	139.60	DEG.	F
C	28	AIR IN SET	124.27	DEG.	F
C	29	FUEL TANK	130.00	DEG.	F
C	30	FUEL OUTLET	146.91	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:03:22

STOPPED SINGLE SCAN 15 JAN 88 16:03:22

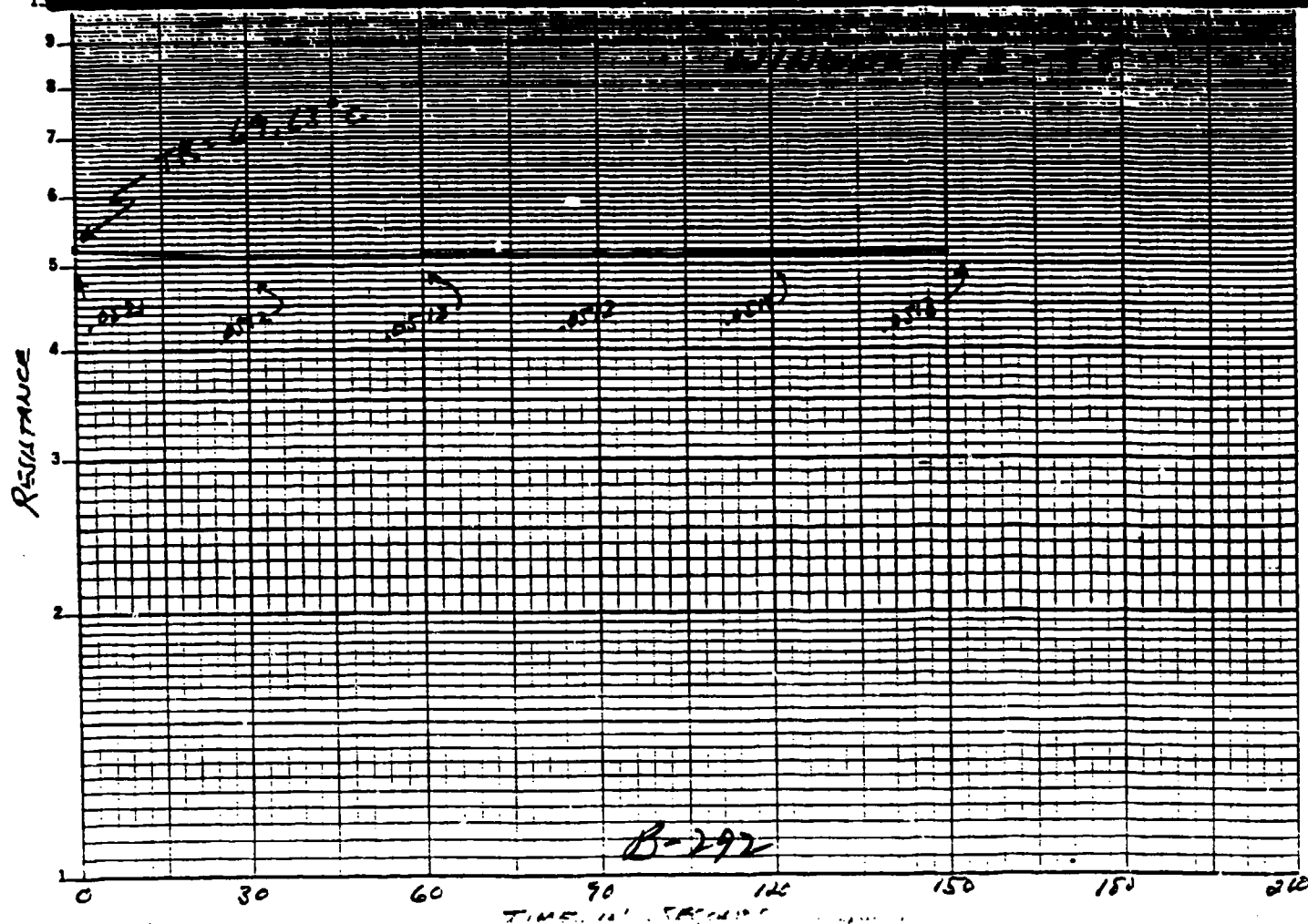
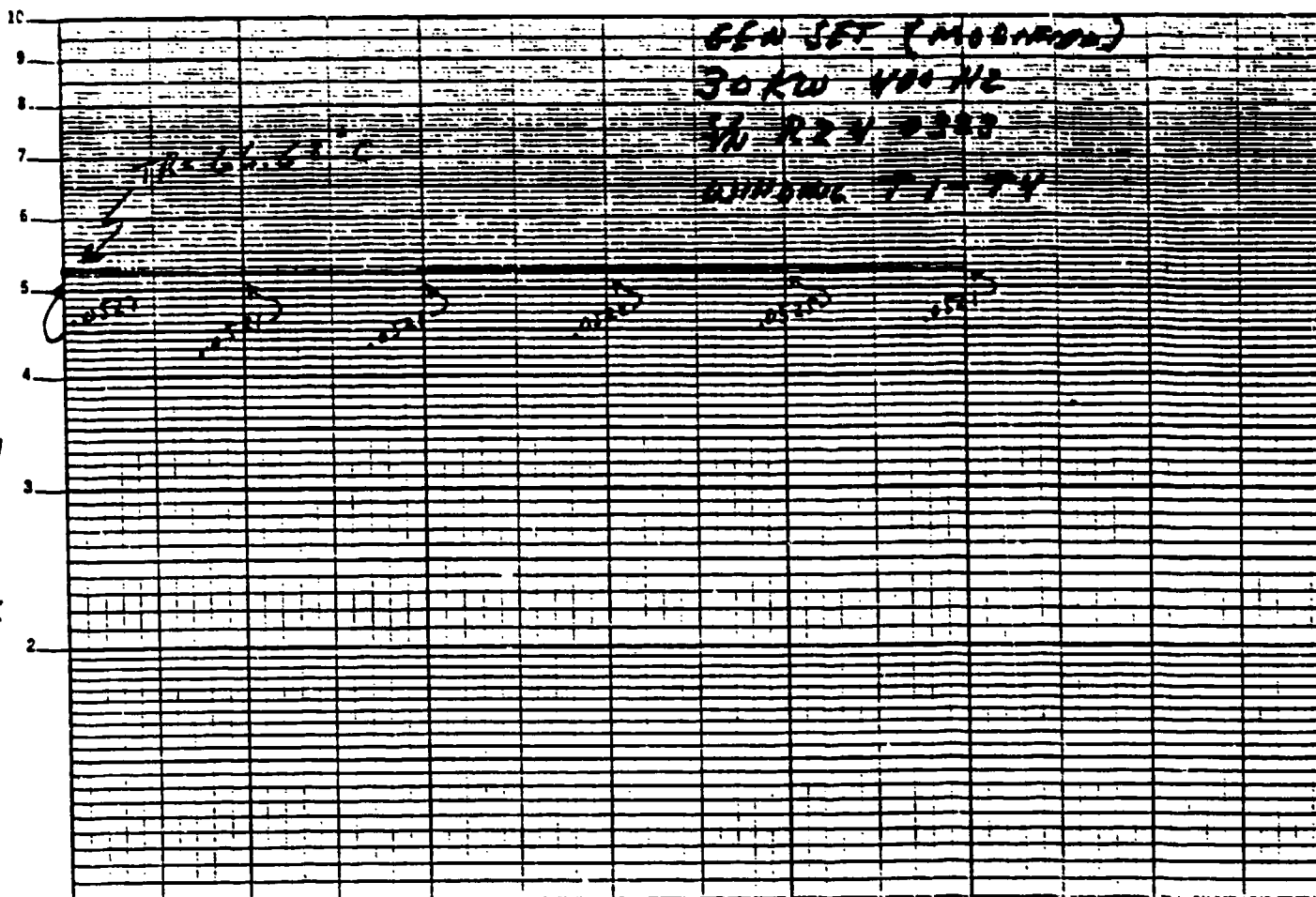
BEGIN SCAN GROUP 1 15 JAN 88 16:04:10
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	659.89	DEG.	F
C	2	EXHAUST 2	699.99	DEG.	F
C	3	EXHAUST 3	713.26	DEG.	F
C	4	EXHAUST 4	711.00	DEG.	F
C	5	EXHAUST 5	721.30	DEG.	F
C	6	EXHAUST 6	665.81	DEG.	F
C	7	ENG. COOL. IN	186.43	DEG.	F
C	8	ENG. COOL. OUT	193.52	DEG.	F
C	9	OIL SUMP	167.26	DEG.	F
C	10	OIL GALLERY	224.71	DEG.	F
C	13	ENG. INTAKE	130.82	DEG.	F
C	14	RAD. TOP LEFT	143.27	DEG.	F
C	15	RAD. BTM LEFT	141.32	DEG.	F
C	16	RAD. TOP RIGHT	144.94	DEG.	F
C	17	RAD. BTM RIGHT	146.02	DEG.	F
C	18	GEN. AIR IN	122.50	DEG.	F
C	19	GEN. AIR OUT	156.32	DEG.	F
C	20	GEN. FRAME TOP	130.39	DEG.	F
C	21	GEN. FRAME BTM	135.31	DEG.	F
C	22	GEN. EXCITER	137.46	DEG.	F
C	23	GEN. VOLT. REG.	133.83	DEG.	F
C	24	CONTROL PANEL	136.52	DEG.	F
C	25	RELAY AREA	120.67	DEG.	F
C	26	BATTERY LEFT	138.76	DEG.	F
C	27	BATTERY RIGHT	139.43	DEG.	F
C	28	AIR IN SET	124.32	DEG.	F
C	29	FUEL TANK	129.98	DEG.	F
C	30	FUEL OUTLET	148.15	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:04:20

STOPPED SINGLE SCAN 15 JAN 88 16:04:20

4/17/68 7:15 PM



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GENSET (MOOTING)

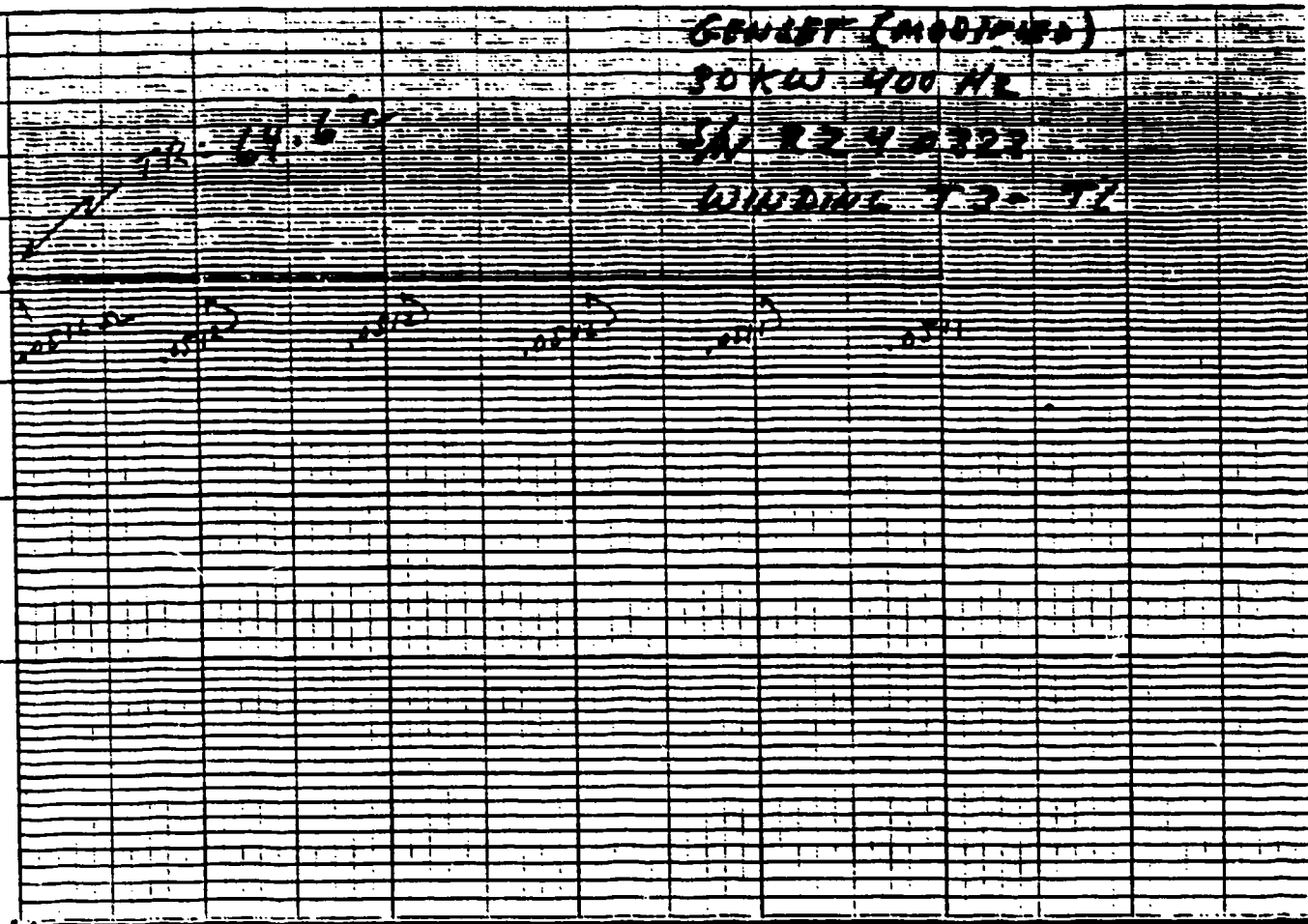
30 KW 400 Hz

SN 1240323

WINDING T3-T1

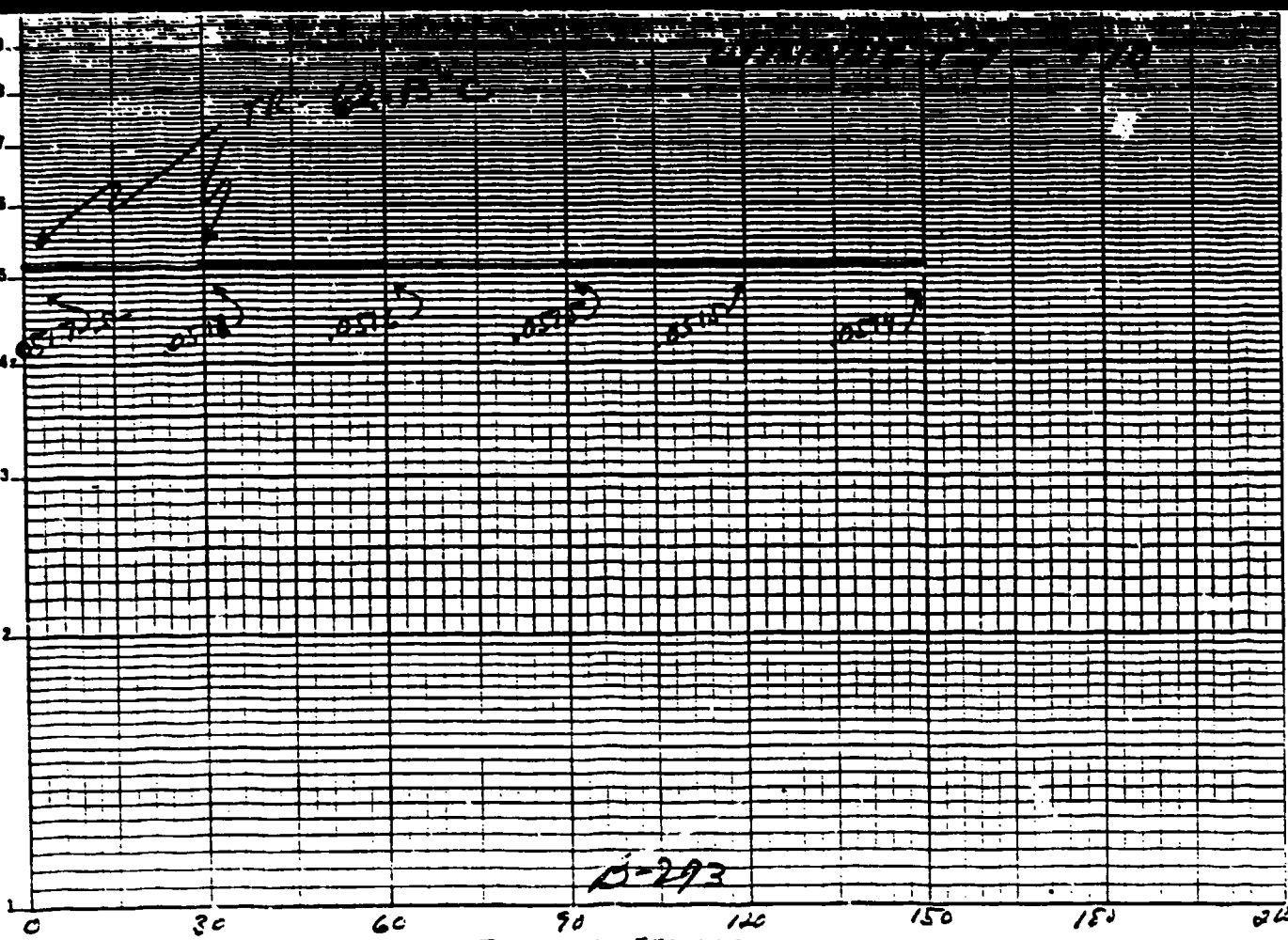
TR 64.6°C

RESISTANCE



TR 62.75°C

RESISTANCE

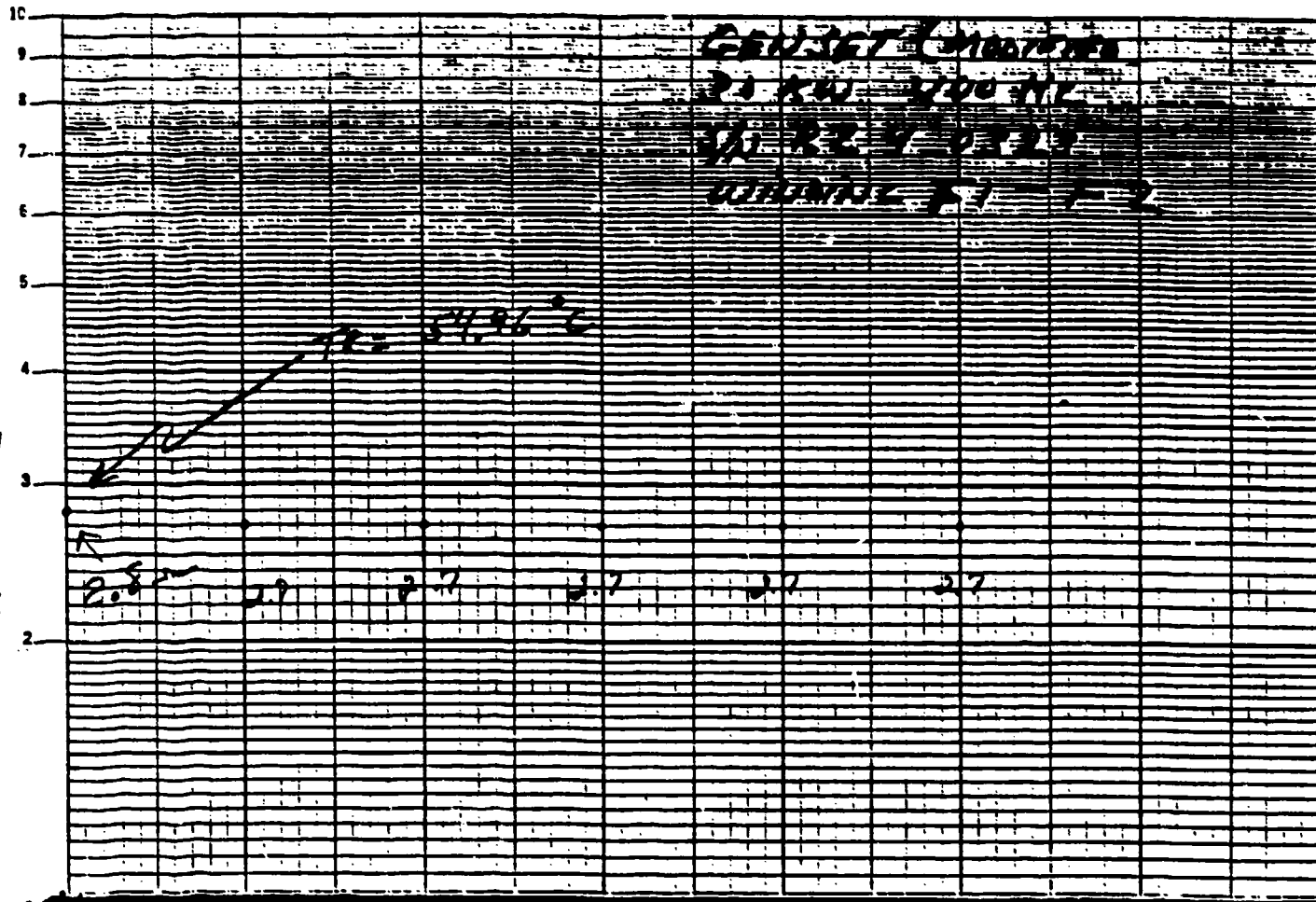


D-293

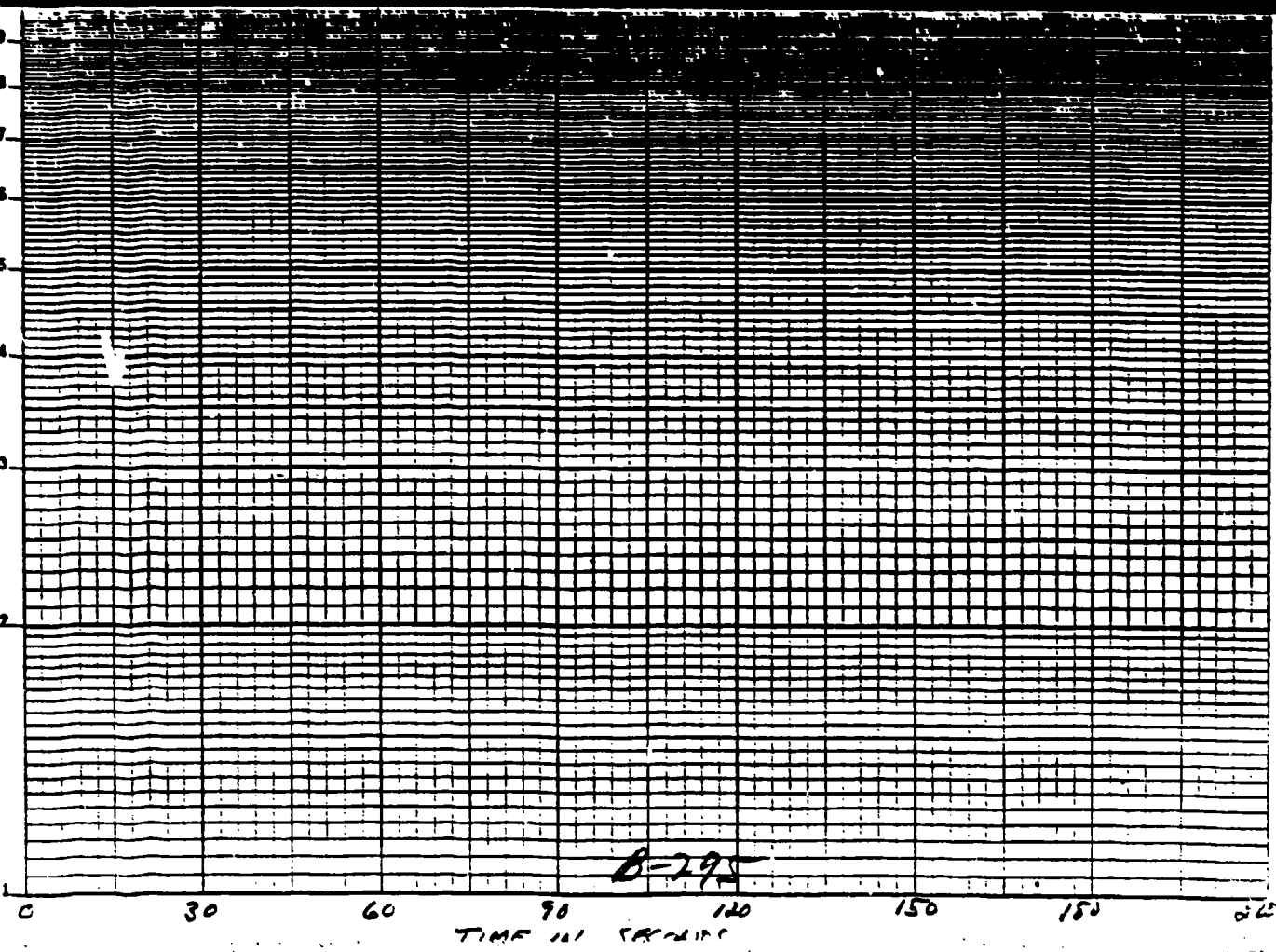
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45 48 1/2 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

RESISTANCE



RESISTANCE



WINDING ~~RESTART~~

BEGIN SCAN GROUP 1 15 JAN 88 16:45:23
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	730.25	DEG.	F
C	2	EXHAUST 2	838.78	DEG.	F
C	3	EXHAUST 3	855.30	DEG.	F
C	4	EXHAUST 4	845.69	DEG.	F
C	5	EXHAUST 5	858.26	DEG.	F
C	6	EXHAUST 6	803.34	DEG.	F
C	7	ENG. COOL. IN	192.65	DEG.	F
C	8	ENG. COOL. OUT	138.52	DEG.	F
C	9	OIL SUMP	202.26	DEG.	F
C	10	OIL GALLERY	201.51	DEG.	F
C	13	ENG. INTAKE	134.82	DEG.	F
C	14	RAD. TOP LEFT	147.80	DEG.	F
C	15	RAD. BTM LEFT	144.35	DEG.	F
C	16	RAD. TOP RIGHT	146.50	DEG.	F
C	17	RAD. BTM RIGHT	147.74	DEG.	F
C	18	GEN. AIR IN	124.00	DEG.	F
C	19	GEN. AIR OUT	155.66	DEG.	F
C	20	GEN. FRAME TOP	138.51	DEG.	F
C	21	GEN. FRAME BTM	141.11	DEG.	F
C	22	GEN. EXCITER	135.86	DEG.	F
C	23	GEN. VOLT. REG.	131.55	DEG.	F
C	24	CONTROL PANEL	132.42	DEG.	F
C	25	RELAY AREA	122.86	DEG.	F
C	26	BATTERY LEFT	139.14	DEG.	F
C	27	BATTERY RIGHT	137.87	DEG.	F
C	28	AIR IN SET	126.15	DEG.	F
C	29	FUEL TANK	129.46	DEG.	F
C	30	FUEL OUTLET	141.26	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:45:33

STOPPED SINGLE SCAN 15 JAN 88 16:45:33

BEGIN SCAN GROUP 1 15 JAN 88 16:55:06
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	822.22	DEG.	F
C	2	EXHAUST 2	861.41	DEG.	F
C	3	EXHAUST 3	886.98	DEG.	F
C	4	EXHAUST 4	886.93	DEG.	F
C	5	EXHAUST 5	898.26	DEG.	F
C	6	EXHAUST 6	828.82	DEG.	F
C	7	ENG. COOL. IN	207.38	DEG.	F
C	8	ENG. COOL. OUT	215.63	DEG.	F
C	9	OIL SUMP	231.78	DEG.	F
C	10	OIL GALLERY	233.62	DEG.	F
C	13	ENG. INTAKE	136.84	DEG.	F
C	14	RAD. TOP LEFT	154.58	DEG.	F
C	15	RAD. BTM LEFT	152.99	DEG.	F
C	16	RAD. TOP RIGHT	158.59	DEG.	F
C	17	RAD. BTM RIGHT	153.56	DEG.	F
C	18	GEN. AIR IN	124.23	DEG.	F
C	19	GEN. AIR OUT	161.57	DEG.	F
C	20	GEN. FRAME TOP	137.87	DEG.	F
C	21	GEN. FRAME BTM	135.82	DEG.	F
C	22	GEN. EXCITER	142.83	DEG.	F
C	23	GEN. VOLT. REG.	135.81	DEG.	F
C	24	CONTROL PANEL	135.28	DEG.	F
C	25	RELAY AREA	128.89	DEG.	F
C	26	BATTERY LEFT	137.72	DEG.	F
C	27	BATTERY RIGHT	139.48	DEG.	F
C	28	AIR IN SET	126.37	DEG.	F
C	29	FUEL TANK	129.64	DEG.	F
C	30	FUEL OUTLET	146.80	DEG.	F

END SCAN GROUP 1 15 JAN 88 16:55:15

STOPPED SINGLE SCAN 15 JAN 88 16:55:15

BEGIN SCAN GROUP 1 15 JAN 88 17:06:37
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	819.90	DEG.	F
C	2	EXHAUST 2	874.85	DEG.	F
C	3	EXHAUST 3	884.38	DEG.	F
C	4	EXHAUST 4	878.43	DEG.	F
C	5	EXHAUST 5	893.10	DEG.	F
C	6	EXHAUST 6	810.42	DEG.	F
C	7	ENG. COOL. IN	213.16	DEG.	F
C	8	ENG. COOL. OUT	226.51	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	246.54	DEG.	F
C	13	ENG. INTAKE	137.68	DEG.	F
C	14	RAD. TOP LEFT	157.22	DEG.	F
C	15	RAD. BTM LEFT	154.82	DEG.	F
C	16	RAD. TOP RIGHT	153.49	DEG.	F
C	17	RAD. BTM RIGHT	156.96	DEG.	F
C	18	GEN. AIR IN	122.43	DEG.	F
C	19	GEN. AIR OUT	164.34	DEG.	F
C	20	GEN. FRAME TOP	138.45	DEG.	F
C	21	GEN. FRAME BTM	139.42	DEG.	F
C	22	GEN. EXCITER	141.90	DEG.	F
C	23	GEN. VOLT. REG.	135.39	DEG.	F
C	24	CONTROL PANEL	136.55	DEG.	F
C	25	RELAY AREA	122.28	DEG.	F
C	26	BATTERY LEFT	141.75	DEG.	F
C	27	BATTERY RIGHT	148.48	DEG.	F
C	28	AIR IN SET	123.47	DEG.	F
C	29	FUEL TANK	129.87	DEG.	F
C	30	FUEL OUTLET	146.52	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:06:46

STOPPED SINGLE SCAN 15 JAN 88 17:06:46

BEGIN SCAN GROUP 1 15 JAN 88 17:16:16
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	819.98	DEG.	F
C	2	EXHAUST 2	867.49	DEG.	F
C	3	EXHAUST 3	898.56	DEG.	F
C	4	EXHAUST 4	876.85	DEG.	F
C	5	EXHAUST 5	898.36	DEG.	F
C	6	EXHAUST 6	815.83	DEG.	F
C	7	ENG. COOL. IN	212.99	DEG.	F
C	8	ENG. COOL. OUT	219.85	DEG.	F
C	9	OIL SUMP	212.85	DEG.	F
C	10	OIL GALLERY	249.51	DEG.	F
C	13	ENG. INTAKE	135.51	DEG.	F
C	14	RAD. TOP LEFT	155.53	DEG.	F
C	15	RAD. BTM LEFT	153.65	DEG.	F
C	16	RAD. TOP RIGHT	154.72	DEG.	F
C	17	RAD. BTM RIGHT	155.20	DEG.	F
C	18	GEN. AIR IN	121.12	DEG.	F
C	19	GEN. AIR OUT	166.85	DEG.	F
C	20	GEN. FRAME TOP	134.61	DEG.	F
C	21	GEN. FRAME BTM	136.54	DEG.	F
C	22	GEN. EXCITER	142.25	DEG.	F
C	23	GEN. VOLT. REG.	137.68	DEG.	F
C	24	CONTROL PANEL	137.46	DEG.	F
C	25	RELAY AREA	121.87	DEG.	F
C	26	BATTERY LEFT	141.12	DEG.	F
C	27	BATTERY RIGHT	141.41	DEG.	F
C	28	AIR IN SET	124.42	DEG.	F
C	29	FUEL TANK	130.52	DEG.	F
C	30	FUEL OUTLET	149.37	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:16:25

STOPPED SINGLE SCAN 15 JAN 88 17:16:26

END SCAN GROUP 0 15 JAN 88 17:19:35
STOPPED SINGLE SCAN 15 JAN 88 17:19:35

BEGIN SCAN GROUP 1 15 JAN 88 17:20:00
30 KM 400 HZ GEN SET 50N R24 0323

C	1	EXHAUST 1	535.64	DEG.	F
C	2	EXHAUST 2	564.76	DEG.	F
C	3	EXHAUST 3	614.99	DEG.	F
C	4	EXHAUST 4	628.19	DEG.	F
C	5	EXHAUST 5	638.82	DEG.	F
C	6	EXHAUST 6	567.53	DEG.	F
C	7	ENG. COOL. IN	286.81	DEG.	F
C	8	ENG. COOL. OUT	227.16	DEG.	F
C	9	OIL SUMP	258.94	DEG.	F
C	10	OIL GALLERY	242.77	DEG.	F
C	11	ENG. INTAKE	139.55	DEG.	F
C	12	RAD. TOP LEFT	174.19	DEG.	F
C	13	RAD. BTM LEFT	166.31	DEG.	F
C	14	RAD. TOP RIGHT	184.25	DEG.	F
C	15	RAD. BTM RIGHT	172.19	DEG.	F
C	16	GEN. AIR IN	123.39	DEG.	F
C	17	GEN. AIR OUT	163.38	DEG.	F
C	18	GEN. FRAME TOP	139.88	DEG.	F
C	19	GEN. FRAME BTM	142.52	DEG.	F
C	20	GEN. EXCITER	143.63	DEG.	F
C	21	GEN. VOLT. REG.	136.78	DEG.	F
C	22	CONTROL PANEL	137.52	DEG.	F
C	23	RELAY AREA	121.35	DEG.	F
C	24	BATTERY LEFT	143.36	DEG.	F
C	25	BATTERY RIGHT	143.51	DEG.	F
C	26	AIR IN SET	124.82	DEG.	F
C	27	FUEL TANK	138.77	DEG.	F
C	28	FUEL OUTLET	148.32	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:20:10

STOPPED SINGLE SCAN 15 JAN 88 17:20:10

BEGIN SCAN GROUP 0 15 JAN 88 17:19:23
GO

C	0		.00000		
C	1	EXHAUST 1	607.89	DEG.	F
C	2	EXHAUST 2	637.31	DEG.	F
C	3	EXHAUST 3	678.38	DEG.	F
C	4	EXHAUST 4	678.25	DEG.	F
C	5	EXHAUST 5	691.57	DEG.	F
C	6	EXHAUST 6	627.35	DEG.	F
C	7	ENG. COOL. IN	289.91	DEG.	F
C	8	ENG. COOL. OUT	218.79	DEG.	F
C	9	OIL SUMP	258.53	DEG.	F
C	10	OIL GALLERY	245.61	DEG.	F
C	11	OIL COOLER IN		OPEN TC	
C	12	OIL COOLER OUT		OPEN TC	
C	13	ENG. INTAKE	137.22	DEG.	F
C	14	RAD. TOP LEFT	164.27	DEG.	F
C	15	RAD. BTM LEFT	161.43	DEG.	F
C	16	RAD. TOP RIGHT	169.58	DEG.	F
C	17	RAD. BTM RIGHT	163.87	DEG.	F
C	18	GEN. AIR IN	122.61	DEG.	F
C	19	GEN. AIR OUT	164.68	DEG.	F
C	20	GEN. FRAME TOP	135.35	DEG.	F
C	21	GEN. FRAME BTM	148.37	DEG.	F
C	22	GEN. EXCITER	142.85	DEG.	F
C	23	GEN. VOLT. REG.	136.78	DEG.	F
C	24	CONTROL PANEL	137.57	DEG.	F
C	25	RELAY AREA	121.14	DEG.	F
C	26	BATTERY LEFT	142.98	DEG.	F
C	27	BATTERY RIGHT	142.89	DEG.	F
C	28	AIR IN SET	123.91	DEG.	F
C	29	FUEL TANK	138.71	DEG.	F
C	30	FUEL OUTLET	148.53	DEG.	F

BEGIN SCAN GROUP 1 15 JAN 88 17:20:33
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	435.25	DEG.	F
C	2	EXHAUST 2	525.81	DEG.	F
C	3	EXHAUST 3	579.26	DEG.	F
C	4	EXHAUST 4	593.38	DEG.	F
C	5	EXHAUST 5	681.47	DEG.	F
C	6	EXHAUST 6	529.72	DEG.	F
C	7	ENG. COOL. IN	284.47	DEG.	F
C	8	ENG. COOL. OUT	232.66	DEG.	F
C	9	OIL SUMP	251.82	DEG.	F
C	10	OIL GALLERY	238.30	DEG.	F
C	13	ENG. INTAKE	141.18	DEG.	F
C	14	RAD. TOP LEFT	179.83	DEG.	F
C	15	RAD. BTM LEFT	169.20	DEG.	F
C	16	RAD. TOP RIGHT	189.93	DEG.	F
C	17	RAD. BTM RIGHT	175.88	DEG.	F
C	18	GEN. AIR IN	123.95	DEG.	F
C	19	GEN. AIR OUT	162.92	DEG.	F
C	20	GEN. FRAME TOP	142.37	DEG.	F
C	21	GEN. FRAME BTM	143.93	DEG.	F
C	22	GEN. EXCITER	144.86	DEG.	F
C	23	GEN. VOLT. REG.	136.84	DEG.	F
C	24	CONTROL PANEL	137.63	DEG.	F
C	25	RELAY AREA	121.61	DEG.	F
C	26	BATTERY LEFT	143.64	DEG.	F
C	27	BATTERY RIGHT	143.95	DEG.	F
C	28	AIR IN SET	125.28	DEG.	F
C	29	FUEL TANK	138.81	DEG.	F
C	30	FUEL OUTLET	148.43	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:20:42

STOPPED SINGLE SCAN 15 JAN 88 17:20:42

BEGIN SCAN GROUP 1 15 JAN 88 17:20:52
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	477.32	DEG.	F
C	2	EXHAUST 2	588.44	DEG.	F
C	3	EXHAUST 3	561.63	DEG.	F
C	4	EXHAUST 4	575.62	DEG.	F
C	5	EXHAUST 5	582.45	DEG.	F
C	6	EXHAUST 6	511.49	DEG.	F
C	7	ENG. COOL. IN	284.82	DEG.	F
C	8	ENG. COOL. OUT	235.61	DEG.	F
C	9	OIL SUMP	258.97	DEG.	F
C	10	OIL GALLERY	236.84	DEG.	F
C	13	ENG. INTAKE	142.82	DEG.	F
C	14	RAD. TOP LEFT	181.38	DEG.	F
C	15	RAD. BTM LEFT	178.53	DEG.	F
C	16	RAD. TOP RIGHT	192.51	DEG.	F
C	17	RAD. BTM RIGHT	176.64	DEG.	F
C	18	GEN. AIR IN	124.26	DEG.	F
C	19	GEN. AIR OUT	162.73	DEG.	F
C	20	GEN. FRAME TOP	142.99	DEG.	F
C	21	GEN. FRAME BTM	144.68	DEG.	F
C	22	GEN. EXCITER	145.53	DEG.	F
C	23	GEN. VOLT. REG.	136.89	DEG.	F
C	24	CONTROL PANEL	137.56	DEG.	F
C	25	RELAY AREA	121.74	DEG.	F
C	26	BATTERY LEFT	143.76	DEG.	F
C	27	BATTERY RIGHT	144.15	DEG.	F
C	28	AIR IN SET	125.41	DEG.	F
C	29	FUEL TANK	138.79	DEG.	F
C	30	FUEL OUTLET	148.55	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:21:01

STOPPED SINGLE SCAN 15 JAN 88 17:21:01

BEGIN SCAN GROUP 1 15 JAN 88 17:21:16
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	458.47	DEG.	F
C	2	EXHAUST 2	498.88	DEG.	F
C	3	EXHAUST 3	541.68	DEG.	F
C	4	EXHAUST 4	555.11	DEG.	F
C	5	EXHAUST 5	568.56	DEG.	F
C	6	EXHAUST 6	451.34	DEG.	F
C	7	ENG. COOL. IN	283.95	DEG.	F
C	8	ENG. COOL. OUT	237.85	DEG.	F
C	9	OIL SUMP	258.98	DEG.	F
C	10	OIL GALLERY	233.45	DEG.	F
C	13	ENG. INTAKE	142.83	DEG.	F
C	14	RAD. TOP LEFT	183.61	DEG.	F
C	15	RAD. BTM LEFT	171.62	DEG.	F
C	16	RAD. TOP RIGHT	194.48	DEG.	F
C	17	RAD. BTM RIGHT	177.13	DEG.	F
C	18	GEN. AIR IN	124.67	DEG.	F
C	19	GEN. AIR OUT	162.75	DEG.	F
C	20	GEN. FRAME TOP	144.46	DEG.	F
C	21	GEN. FRAME BTM	145.34	DEG.	F
C	22	GEN. EXCITER	146.51	DEG.	F
C	23	GEN. VOLT. REG.	136.96	DEG.	F
C	24	CONTROL PANEL	137.83	DEG.	F
C	25	RELAY AREA	121.88	DEG.	F
C	26	BATTERY LEFT	143.91	DEG.	F
C	27	BATTERY RIGHT	144.41	DEG.	F
C	28	AIR IN SET	125.45	DEG.	F
C	29	FUEL TANK	138.81	DEG.	F
C	30	FUEL OUTLET	148.81	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:21:26

STOPPED SINGLE SCAN 15 JAN 88 17:21:26

BEGIN SCAN GROUP 1 15 JAN 88 17:21:46
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	439.53	DEG.	F
C	2	EXHAUST 2	471.24	DEG.	F
C	3	EXHAUST 3	528.87	DEG.	F
C	4	EXHAUST 4	532.48	DEG.	F
C	5	EXHAUST 5	536.51	DEG.	F
C	6	EXHAUST 6	469.95	DEG.	F
C	7	ENG. COOL. IN	283.88	DEG.	F
C	8	ENG. COOL. OUT	237.83	DEG.	F
C	9	OIL SUMP	258.63	DEG.	F
C	10	OIL GALLERY	238.47	DEG.	F
C	13	ENG. INTAKE	143.81	DEG.	F
C	14	RAD. TOP LEFT	186.68	DEG.	F
C	15	RAD. BTM LEFT	172.37	DEG.	F
C	16	RAD. TOP RIGHT	197.69	DEG.	F
C	17	RAD. BTM RIGHT	177.47	DEG.	F
C	18	GEN. AIR IN	124.54	DEG.	F
C	19	GEN. AIR OUT	162.78	DEG.	F
C	20	GEN. FRAME TOP	146.13	DEG.	F
C	21	GEN. FRAME BTM	146.13	DEG.	F
C	22	GEN. EXCITER	147.28	DEG.	F
C	23	GEN. VOLT. REG.	137.18	DEG.	F
C	24	CONTROL PANEL	137.99	DEG.	F
C	25	RELAY AREA	122.88	DEG.	F
C	26	BATTERY LEFT	144.19	DEG.	F
C	27	BATTERY RIGHT	144.72	DEG.	F
C	28	AIR IN SET	125.28	DEG.	F
C	29	FUEL TANK	138.83	DEG.	F
C	30	FUEL OUTLET	149.19	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:21:56

STOPPED SINGLE SCAN 15 JAN 88 17:21:56

REGIN SCAN GROUP 1 15 JAN 88 17:22:16
36 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	424.25	DEG.	F
C	2	EXHAUST 2	455.67	DEG.	F
C	3	EXHAUST 3	501.53	DEG.	F
C	4	EXHAUST 4	512.73	DEG.	F
C	5	EXHAUST 5	515.65	DEG.	F
C	6	EXHAUST 6	451.94	DEG.	F
C	7	ENG. COOL. IN	283.28	DEG.	F
C	8	ENG. COOL. OUT	238.12	DEG.	F
C	9	OIL SUMP	258.38	DEG.	F
C	10	OIL GALLERY	228.82	DEG.	F
C	13	ENG. INTAKE	144.76	DEG.	F
C	14	RAD. TOP LEFT	189.44	DEG.	F
C	15	RAD. BTM LEFT	172.99	DEG.	F
C	16	RAD. TOP RIGHT	201.00	DEG.	F
C	17	RAD. BTM RIGHT	178.51	DEG.	F
C	18	GEN. AIR IN	125.25	DEG.	F
C	19	GEN. AIR OUT	162.74	DEG.	F
C	20	GEN. FRAME TOP	147.69	DEG.	F
C	21	GEN. FRAME BTM	146.93	DEG.	F
C	22	GEN. EXCITER	148.26	DEG.	F
C	23	GEN. VOLT. REG.	137.31	DEG.	F
C	24	CONTROL PANEL	138.18	DEG.	F
C	25	RELAY AREA	122.11	DEG.	F
C	26	BATTERY LEFT	144.42	DEG.	F
C	27	BATTERY RIGHT	145.02	DEG.	F
C	28	AIR IN SET	125.59	DEG.	F
C	29	FUEL TANK	138.87	DEG.	F
C	30	FUEL OUTLET	149.63	DEG.	F

END SCAN GROUP 1 15 JAN 88 17:22:25

STOPPED SINGLE SCAN 15 JAN 88 17:22:25

TEST DATA



ITEM 30 kW 400 Hz
 GEN SET
 M001F1E0
 MFR. L1004 WELDON
 MODEL NO. MFD 114A
 SERIAL NO. 124 0323

National Technical Systems
 Scientific Services Group
 Testing Division
 PO. Box 38
 Harwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. M156 705
 SHEET 2 OF 3
 DATE 2 FEB 1988
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER R.S.

FREQUENCY AND VOLTAGE REGULATION

STABILITY, AND TRANSIENT RESPONSE TEST

(SHORT TERM)

FREQUENCY										VOLTAGE									
MAXIMUM EXCURSION					REC.		CONSTANT LOAD		REGULATION		MAXIMUM EXCURSION				REC.		CONSTANT LOAD		
OVERSHOOT		UNDERSHOOT			TIME		BANDWIDTH	FREQ.	VOLT.	OVERSHOOT	UNDERSHOOT		TIME		BANDWIDTH				
Hz	%	Hz	%	SEC		Hz	%	%	%	VOLT	VOLT	%	SEC		Hz	%			
14-15		.69	.17	0		.17	.04	.025	.41			.69	.58	0		.17	.15		
15-16	.35			.31		.17	.04	.025	.41	.87	.72			.08		.17	.15		
16-17		.139	.35	.39		.17	.04	.05	.41			.69	.58	.08		.17	.15		
17-18	.39			.65		.17	.04	.05	.41	.87	.72			.16		.17	.15		
18-19		.139	.35	.23		.17	.04	.025	.41			.52	.43	0		.17	.15		
19-20	.43			.16		.17	.04	.025	.41	.69	.58			.08		.17	.15		
20-21		.69	.17	0		.17	.04	.025	0			.52	.43	0		.17	.15		
21-22	.30			0		.17	.04	0	0	.62	.43			0		.17	.15		
22-23		.87	.22	0		.17	.04	.025	0			.35	.29	0		.17	.15		
23-24	.22			.23		.17	.04	0	0	.35	.29			0		.17	.15		
24-25		.87	.22	.16		.17	.04	.05	0			.35	.29	0		.17	.15		
25-26	.22			.23		.17	.04	0	0	.25	.29			0		.17	.15		
26-27		.226	.56	.31		.17	.04	.025	.41			1.39	1.16	.47		.17	.15		

NOTES:

TEST DATA

NAS

ITEM 30 Kw 400 Hz
GENERATOR SET
MODIFIED
 MFR. LARRY WELSH
 MODEL NO. MFR 114A
 SERIAL NO. RZ 4 0323

National Technical Systems
 Scientific Services Group
 Testing Division
 PO. Box 38
 Hartwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. AKL 510 705
 SHEET 3 OF 3
 DATE 2 FEB 1985
 JOB NO. 535 2140
 PROJ. ENGR.
 RECORDER/OBSERVER RL

FREQUENCY AND VOLTAGE REGULATION,
 STABILITY, AND TRANSIENT RESPONSE TEST
 (SHORT TERM)

(SHORT TERM)											
VOLTAGE											
FREQUENCY											
CONSTANT LOAD											
REGULATION											
MAXIMUM EXCURSION											
UNDERSHOOT											
OVERSHOOT											
TIME											
SEC											
VOLT											
Hertz											
PERCENT											
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WATT-AMPERE-VOLT-AMPERE-V											

B-301

NOTES:

SHORT TERM 608.1

BEGIN SCAN GROUP 1 14 JAN 88 10:50:09
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	794.91	DEG.	F
C	2	EXHAUST 2	841.67	DEG.	F
C	3	EXHAUST 3	852.33	DEG.	F
C	4	EXHAUST 4	852.14	DEG.	F
C	5	EXHAUST 5	854.78	DEG.	F
C	6	EXHAUST 6	767.84	DEG.	F
C	7	ENG. COOL. IN	288.57	DEG.	F
C	8	ENG. COOL. OUT	216.77	DEG.	F
C	9	OIL SUMP	248.26	DEG.	F
C	10	OIL GALLERY	251.10	DEG.	F
C	13	ENG. INTAKE	136.26	DEG.	F
C	14	RAD. TOP LEFT	157.35	DEG.	F
C	15	RAD. BTM LEFT	154.13	DEG.	F
C	16	RAD. TOP RIGHT	153.18	DEG.	F
C	17	RAD. BTM RIGHT	155.13	DEG.	F
C	18	GEN. AIR IN	122.74	DEG.	F
C	19	GEN. AIR OUT	168.79	DEG.	F
C	20	GEN. FRAME TOP	135.99	DEG.	F
C	21	GEN. FRAME BTM	139.36	DEG.	F
C	22	GEN. EXCITER	139.75	DEG.	F
C	23	GEN. VOLT. REG.	138.33	DEG.	F
C	24	CONTROL PANEL	138.23	DEG.	F
C	25	RELAY AREA	121.70	DEG.	F
C	26	BATTERY LEFT	135.41	DEG.	F
C	27	BATTERY RIGHT	133.64	DEG.	F
C	28	AIR IN SET	126.35	DEG.	F
C	29	FUEL TANK	185.21	DEG.	F
C	30	FUEL OUTLET	147.82	DEG.	F

END SCAN GROUP 1 14 JAN 88 10:50:18

STOPPED SINGLE SCAN 14 JAN 88 10:50:18

BEGIN SCAN GROUP 1 14 JAN 88 11:00:10
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	793.90	DEG.	F
C	2	EXHAUST 2	839.60	DEG.	F
C	3	EXHAUST 3	852.50	DEG.	F
C	4	EXHAUST 4	854.62	DEG.	F
C	5	EXHAUST 5	853.06	DEG.	F
C	6	EXHAUST 6	765.62	DEG.	F
C	7	ENG. COOL. IN	287.95	DEG.	F
C	8	ENG. COOL. OUT	216.76	DEG.	F
C	9	OIL SUMP	248.66	DEG.	F
C	10	OIL GALLERY	252.81	DEG.	F
C	13	ENG. INTAKE	137.49	DEG.	F
C	14	RAD. TOP LEFT	157.20	DEG.	F
C	15	RAD. BTM LEFT	154.88	DEG.	F
C	16	RAD. TOP RIGHT	153.37	DEG.	F
C	17	RAD. BTM RIGHT	155.50	DEG.	F
C	18	GEN. AIR IN	123.57	DEG.	F
C	19	GEN. AIR OUT	168.98	DEG.	F
C	20	GEN. FRAME TOP	135.51	DEG.	F
C	21	GEN. FRAME BTM	148.64	DEG.	F
C	22	GEN. EXCITER	140.42	DEG.	F
C	23	GEN. VOLT. REG.	138.54	DEG.	F
C	24	CONTROL PANEL	138.14	DEG.	F
C	25	RELAY AREA	121.56	DEG.	F
C	26	BATTERY LEFT	136.69	DEG.	F
C	27	BATTERY RIGHT	134.87	DEG.	F
C	28	AIR IN SET	125.16	DEG.	F
C	29	FUEL TANK	187.83	DEG.	F
C	30	FUEL OUTLET	148.32	DEG.	F

END SCAN GROUP 1 14 JAN 88 11:00:19

STOPPED SINGLE SCAN 14 JAN 88 11:00:19

BEGIN SCAN GROUP 1 14 JAN 88 11:10:05
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	798.04	DEG.	F
C	2	EXHAUST 2	843.94	DEG.	F
C	3	EXHAUST 3	856.14	DEG.	F
C	4	EXHAUST 4	854.26	DEG.	F
C	5	EXHAUST 5	849.99	DEG.	F
C	6	EXHAUST 6	766.85	DEG.	F
C	7	ENG. COOL. IN	288.44	DEG.	F
C	8	ENG. COOL. OUT	216.98	DEG.	F
C	9	OIL SUMP	248.91	DEG.	F
C	10	OIL GALLERY	253.81	DEG.	F
C	13	ENG. INTAKE	137.66	DEG.	F
C	14	RAD. TOP LEFT	157.10	DEG.	F
C	15	RAD. BTM LEFT	153.85	DEG.	F
C	16	RAD. TOP RIGHT	153.54	DEG.	F
C	17	RAD. BTM RIGHT	155.78	DEG.	F
C	18	GEN. AIR IN	123.40	DEG.	F
C	19	GEN. AIR OUT	169.12	DEG.	F
C	20	GEN. FRAME TOP	136.82	DEG.	F
C	21	GEN. FRAME BTM	148.58	DEG.	F
C	22	GEN. EXCITER	148.18	DEG.	F
C	23	GEN. VOLT. REG.	138.77	DEG.	F
C	24	CONTROL PANEL	138.24	DEG.	F
C	25	RELAY AREA	121.81	DEG.	F
C	26	BATTERY LEFT	137.83	DEG.	F
C	27	BATTERY RIGHT	135.28	DEG.	F
C	28	AIR IN SET	125.48	DEG.	F
C	29	FUEL TANK	189.78	DEG.	F
C	30	FUEL OUTLET	147.74	DEG.	F

END SCAN GROUP 1 14 JAN 88 11:10:14

STOPPED SINGLE SCAN 14 JAN 88 11:10:15

BEGIN SCAN GROUP 1 14 JAN 88 11:20:07
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	797.52	DEG.	F
C	2	EXHAUST 2	846.28	DEG.	F
C	3	EXHAUST 3	856.15	DEG.	F
C	4	EXHAUST 4	855.36	DEG.	F
C	5	EXHAUST 5	856.27	DEG.	F
C	6	EXHAUST 6	765.97	DEG.	F
C	7	ENG. COOL. IN	289.12	DEG.	F
C	8	ENG. COOL. OUT	217.63	DEG.	F
C	9	OIL SUMP	249.62	DEG.	F
C	10	OIL GALLERY	253.37	DEG.	F
C	13	ENG. INTAKE	138.28	DEG.	F
C	14	RAD. TOP LEFT	157.54	DEG.	F
C	15	RAD. BTM LEFT	154.75	DEG.	F
C	16	RAD. TOP RIGHT	154.34	DEG.	F
C	17	RAD. BTM RIGHT	156.73	DEG.	F
C	18	GEN. AIR IN	124.25	DEG.	F
C	19	GEN. AIR OUT	169.98	DEG.	F
C	20	GEN. FRAME TOP	137.12	DEG.	F
C	21	GEN. FRAME BTM	148.76	DEG.	F
C	22	GEN. EXCITER	141.88	DEG.	F
C	23	GEN. VOLT. REG.	139.85	DEG.	F
C	24	CONTROL PANEL	138.43	DEG.	F
C	25	RELAY AREA	122.46	DEG.	F
C	26	BATTERY LEFT	137.39	DEG.	F
C	27	BATTERY RIGHT	135.87	DEG.	F
C	28	AIR IN SET	127.42	DEG.	F
C	29	FUEL TANK	111.60	DEG.	F
C	30	FUEL OUTLET	148.40	DEG.	F

END SCAN GROUP 1 14 JAN 88 11:20:16

STOPPED SINGLE SCAN 14 JAN 88 11:20:16

TEST DATA

ITEM 30 KW / 460VAC

GENERATOR SET

MODIFIED

MFG. LARRY GILBERT

MODEL NO. 'MGP 114A

SERIAL NO. RZ4 0323

NTS

National
Technical
Systems

Scientific
Services
Group

Testing Division
PO Box 36
Hillwood, Virginia 22471
Tel. 703 752 5300

REF. NO. MIL-STD 705 ; 511.2

SHEET 1 OF 1

DATE 14 JAN 1986

JOB NO. 555-2160

PROJ. ENGR.

RECORDER/OBSERVER RM/GC

FREQUENCY ADJUSTMENT RANGE.

INST LINE	STEP NO.	LOAD STEP	E 60230 D VOLTAGE			E 60230 D AMPERES X 100			E 60230 D KILOWATTS X 100			POWER FACTOR	FREQ. Hz	VOLTS VDC	AMPS DCA	AMB. TEMP. °F	MCS W/GU W/HZ
			L1- VAC	L2- VAC	L3- VAC	L1- AC AMPS	L2- AC AMPS	L3- AC AMPS	L1- KW	L2- KW	L3- KW						
1237			START UNIT			START UNIT			START UNIT								
1238			APPLIED 120V			26.8			.257			.80	4226	16.4	5.80	123	10/11/85
1239		RL	120	120	120	26.8	26.8	26.8	.257	.257	.257	.80	4226	16.7	5.85	125	11/11/85
1240		RL	120	120	120	26.8	26.8	26.8	.257	.257	.257	.80	4226	16.8	5.9	126	12/15/85
1241		RL	120	120	120	26.8	26.8	26.8	.257	.257	.257	.80	4226	16.8	5.9	127	1/11/86
1242		RL	120	120	120	26.8	26.8	26.8	.257	.257	.257	.80	4226	16.8	5.9	127	1/11/86
1243			ADJUSTED			FREQUENCY TO MAX			.257			.80	4226	15.2	5.35	125	1/11/86
1244		MAX	119.9	120	120	26.8	26.8	26.8	.257	.257	.257	.80	4226	15.2	5.35	125	1/11/86
1245		MIN	ADJUSTED			FREQUENCY TO MIN			.257			.77	390	18.4	6.5	125	1/11/86
1246			120	120	120	26.8	26.8	26.8	.257	.257	.257	.77	390	18.4	6.5	125	1/11/86
1247			END OF TEST														
1248			SHUT UNIT DOWN														

UNIT 0.0 NOT ADJUST TO MAX FREQUENCY OF 420 HZ - MAX ATTACHED WAS 412.2 HZ
 MIN. ATTACHED 370 HZ UNDER FREQUENCY LIGHT ON CONTROL PANEL REMANENT AT 380 HZ
 RESET AT 370 HZ

NOTES:

12-30-85

PERMANENT ADJUSTMENT RANGE METHOD 5H.2

BEGIN SCAN GROUP 1 14 JAN 88 12:45:11
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	792.20	DEG.	F
C	2	EXHAUST 2	834.87	DEG.	F
C	3	EXHAUST 3	843.83	DEG.	F
C	4	EXHAUST 4	841.63	DEG.	F
C	5	EXHAUST 5	845.66	DEG.	F
C	6	EXHAUST 6	778.87	DEG.	F
C	7	ENG. COOL. IN	281.82	DEG.	F
C	8	ENG. COOL. OUT	289.86	DEG.	F
C	9	OIL SUMP	225.68	DEG.	F
C	10	OIL GALLERY	225.58	DEG.	F
C	13	ENG. INTAKE	135.19	DEG.	F
C	14	RAD. TOP LEFT	151.57	DEG.	F
C	15	RAD. BTM LEFT	148.92	DEG.	F
C	16	RAD. TOP RIGHT	158.88	DEG.	F
C	17	RAD. BTM RIGHT	151.89	DEG.	F
C	18	GEN. AIR IN	122.38	DEG.	F
C	19	GEN. AIR OUT	162.32	DEG.	F
C	20	GEN. FRAME TOP	134.26	DEG.	F
C	21	GEN. FRAME BTM	138.36	DEG.	F
C	22	GEN. EXCITER	137.74	DEG.	F
C	23	GEN. VOLT. REG.	135.32	DEG.	F
C	24	CONTROL PANEL	135.56	DEG.	F
C	25	RELAY AREA	122.65	DEG.	F
C	26	BATTERY LEFT	138.47	DEG.	F
C	27	BATTERY RIGHT	129.84	DEG.	F
C	28	AIR IN SET	123.63	DEG.	F
C	29	FUEL TANK	121.45	DEG.	F
C	30	FUEL OUTLET	146.33	DEG.	F

END SCAN GROUP 1 14 JAN 88 12:45:21

STOPPED SINGLE SCAN 14 JAN 88 12:45:21

BEGIN SCAN GROUP 1 14 JAN 88 12:55:17
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	796.81	DEG.	F
C	2	EXHAUST 2	843.24	DEG.	F
C	3	EXHAUST 3	846.87	DEG.	F
C	4	EXHAUST 4	858.23	DEG.	F
C	5	EXHAUST 5	857.11	DEG.	F
C	6	EXHAUST 6	771.27	DEG.	F
C	7	ENG. COOL. IN	287.62	DEG.	F
C	8	ENG. COOL. OUT	215.53	DEG.	F
C	9	OIL SUMP	241.26	DEG.	F
C	10	OIL GALLERY	241.48	DEG.	F
C	13	ENG. INTAKE	137.54	DEG.	F
C	14	RAD. TOP LEFT	157.34	DEG.	F
C	15	RAD. BTM LEFT	153.71	DEG.	F
C	16	RAD. TOP RIGHT	153.82	DEG.	F
C	17	RAD. BTM RIGHT	154.56	DEG.	F
C	18	GEN. AIR IN	124.93	DEG.	F
C	19	GEN. AIR OUT	167.87	DEG.	F
C	20	GEN. FRAME TOP	134.48	DEG.	F
C	21	GEN. FRAME BTM	148.58	DEG.	F
C	22	GEN. EXCITER	139.81	DEG.	F
C	23	GEN. VOLT. REG.	135.44	DEG.	F
C	24	CONTROL PANEL	137.54	DEG.	F
C	25	RELAY AREA	123.69	DEG.	F
C	26	BATTERY LEFT	135.48	DEG.	F
C	27	BATTERY RIGHT	133.80	DEG.	F
C	28	AIR IN SET	126.51	DEG.	F
C	29	FUEL TANK	123.26	DEG.	F
C	30	FUEL OUTLET	146.49	DEG.	F

END SCAN GROUP 1 14 JAN 88 12:55:26

STOPPED SINGLE SCAN 14 JAN 88 12:55:26

BEGIN SCAN GROUP 1 14 JAN 88 13:05:18
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	794.89	DEG.	F
C	2	EXHAUST 2	844.81	DEG.	F
C	3	EXHAUST 3	849.85	DEG.	F
C	4	EXHAUST 4	847.57	DEG.	F
C	5	EXHAUST 5	855.28	DEG.	F
C	6	EXHAUST 6	766.28	DEG.	F
C	7	ENG. COOL. IN	288.53	DEG.	F
C	8	ENG. COOL. OUT	216.12	DEG.	F
C	9	OIL SUMP	244.77	DEG.	F
C	10	OIL GALLERY	248.92	DEG.	F
C	13	ENG. INTAKE	137.18	DEG.	F
C	14	RAD. TOP LEFT	156.47	DEG.	F
C	15	RAD. BTM LEFT	153.28	DEG.	F
C	16	RAD. TOP RIGHT	152.94	DEG.	F
C	17	RAD. BTM RIGHT	155.17	DEG.	F
C	18	GEN. AIR IN	123.69	DEG.	F
C	19	GEN. AIR OUT	167.89	DEG.	F
C	20	GEN. FRAME TOP	136.28	DEG.	F
C	21	GEN. FRAME BTM	139.65	DEG.	F
C	22	GEN. EXCITER	139.68	DEG.	F
C	23	GEN. VOLT. REG.	137.94	DEG.	F
C	24	CONTROL PANEL	137.23	DEG.	F
C	25	RELAY AREA	121.75	DEG.	F
C	26	BATTERY LEFT	137.67	DEG.	F
C	27	BATTERY RIGHT	136.88	DEG.	F
C	28	AIR IN SET	125.54	DEG.	F
C	29	FUEL TANK	124.49	DEG.	F
C	30	FUEL OUTLET	148.13	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:05:28

STOPPED SINGLE SCAN 14 JAN 88 13:05:28

BEGIN SCAN GROUP 1 14 JAN 88 13:15:11
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	799.13	DEG.	F
C	2	EXHAUST 2	846.51	DEG.	F
C	3	EXHAUST 3	857.68	DEG.	F
C	4	EXHAUST 4	849.18	DEG.	F
C	5	EXHAUST 5	857.28	DEG.	F
C	6	EXHAUST 6	768.41	DEG.	F
C	7	ENG. COOL. IN	289.93	DEG.	F
C	8	ENG. COOL. OUT	217.48	DEG.	F
C	9	OIL SUMP	253.87	DEG.	F
C	10	OIL GALLERY	258.43	DEG.	F
C	13	ENG. INTAKE	136.88	DEG.	F
C	14	RAD. TOP LEFT	156.13	DEG.	F
C	15	RAD. BTM LEFT	153.33	DEG.	F
C	16	RAD. TOP RIGHT	153.18	DEG.	F
C	17	RAD. BTM RIGHT	156.78	DEG.	F
C	18	GEN. AIR IN	122.65	DEG.	F
C	19	GEN. AIR OUT	168.17	DEG.	F
C	20	GEN. FRAME TOP	135.85	DEG.	F
C	21	GEN. FRAME BTM	148.43	DEG.	F
C	22	GEN. EXCITER	139.58	DEG.	F
C	23	GEN. VOLT. REG.	137.39	DEG.	F
C	24	CONTROL PANEL	138.91	DEG.	F
C	25	RELAY AREA	123.26	DEG.	F
C	26	BATTERY LEFT	138.68	DEG.	F
C	27	BATTERY RIGHT	136.58	DEG.	F
C	28	AIR IN SET	124.72	DEG.	F
C	29	FUEL TANK	125.82	DEG.	F
C	30	FUEL OUTLET	146.18	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:15:28

STOPPED SINGLE SCAN 14 JAN 88 13:15:28

BEGIN SCAN GROUP 1 14 JAN 88 13:18:39
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	794.31	DEG.	F
C	2	EXHAUST 2	846.19	DEG.	F
C	3	EXHAUST 3	849.89	DEG.	F
C	4	EXHAUST 4	846.72	DEG.	F
C	5	EXHAUST 5	855.82	DEG.	F
C	6	EXHAUST 6	761.17	DEG.	F
C	7	ENG. COOL. IN	208.73	DEG.	F
C	8	ENG. COOL. OUT	216.45	DEG.	F
C	9	OIL SUMP	249.35	DEG.	F
C	10	OIL GALLERY	251.82	DEG.	F
C	13	ENG. INTAKE	135.68	DEG.	F
C	14	RAD. TOP LEFT	156.18	DEG.	F
C	15	RAD. BTM LEFT	152.68	DEG.	F
C	16	RAD. TOP RIGHT	153.48	DEG.	F
C	17	RAD. BTM RIGHT	155.57	DEG.	F
C	18	GEN. AIR IN	123.88	DEG.	F
C	19	GEN. AIR OUT	168.67	DEG.	F
C	20	GEN. FRAME TOP	134.88	DEG.	F
C	21	GEN. FRAME BTM	148.11	DEG.	F
C	22	GEN. EXCITER	139.72	DEG.	F
C	23	GEN. VOLT. REG.	137.28	DEG.	F
C	24	CONTROL PANEL	138.23	DEG.	F
C	25	RELAY AREA	122.36	DEG.	F
C	26	BATTERY LEFT	139.17	DEG.	F
C	27	BATTERY RIGHT	137.41	DEG.	F
C	28	AIR IN SET	126.38	DEG.	F
C	29	FUEL TANK	126.23	DEG.	F
C	30	FUEL OUTLET	148.63	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:18:48

STOPPED SINGLE SCAN 14 JAN 88 13:18:48

BEGIN SCAN GROUP 1 14 JAN 88 13:21:36
30 KW 400 HZ GEN SET S/N R24 8323


C	1	EXHAUST 1	798.31	DEG.	F
C	2	EXHAUST 2	845.65	DEG.	F
C	3	EXHAUST 3	855.68	DEG.	F
C	4	EXHAUST 4	856.66	DEG.	F
C	5	EXHAUST 5	857.32	DEG.	F
C	6	EXHAUST 6	788.64	DEG.	F
C	7	ENG. COOL. IN	207.87	DEG.	F
C	8	ENG. COOL. OUT	216.52	DEG.	F
C	9	OIL SUMP	250.21	DEG.	F
C	10	OIL GALLERY	252.34	DEG.	F
C	13	ENG. INTAKE	134.69	DEG.	F
C	14	RAD. TOP LEFT	156.43	DEG.	F
C	15	RAD. BTM LEFT	152.48	DEG.	F
C	16	RAD. TOP RIGHT	153.57	DEG.	F
C	17	RAD. BTM RIGHT	155.93	DEG.	F
C	18	GEN. AIR IN	122.84	DEG.	F
C	19	GEN. AIR OUT	168.59	DEG.	F
C	20	GEN. FRAME TOP	132.64	DEG.	F
C	21	GEN. FRAME BTM	139.98	DEG.	F
C	22	GEN. EXCITER	138.39	DEG.	F
C	23	GEN. VOLT. REG.	137.98	DEG.	F
C	24	CONTROL PANEL	138.63	DEG.	F
C	25	RELAY AREA	122.19	DEG.	F
C	26	BATTERY LEFT	139.45	DEG.	F
C	27	BATTERY RIGHT	136.85	DEG.	F
C	28	AIR IN SET	125.64	DEG.	F
C	29	FUEL TANK	126.52	DEG.	F
C	30	FUEL OUTLET	148.31	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:21:45

STOPPED SINGLE SCAN 14 JAN 88 13:21:45

TEST DATA

UNIT 30 KW 400 Hz
 GENERATOR SET
 170015150
 REGR. LIBBY WELDING
 MODEL NO. MEF 1144
 SERIAL NO. RZ 4 0323


 National Technical Systems
 Scientific Services Group
 Insling Division
 P.O. Box 30
 Hattwood, Virginia 22471
 Tel: 703 752 5300

REF. NO. MK 570705: 511.1
 SHEET 1 OF 1
 DATE 20 JANUARY 1988
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER

Regulator Range Computation Sheet

TIME	LOAD	VOLTAGE				VOLTS	REG.
		L1 - L2 (L1 - L2) 120	L2 - L3 (L2 - L3) 120	L3 - L1 (L3 - L1) 120	AVERAGE		
1402	R/L	(L1 - L2) 121.5	(L2 - L3) 121.5	(L3 - L1) 121.5	120	1.25%	
	N/L				121.5		
	N/L	240	240	240	240	1.39%	
	R/L	237	237	236	236.7		
	N/L	254	254	254	254		
	R/L	252	252	252	252	.79%	
	R/L	197	197	196	196.7		
	N/L	199	199	199	199	1.17%	
	N/L	179.9	180	180			

Where percent of regulation is defined as:

$$\frac{V_{NL} \text{ avg.} - V_{RL} \text{ avg.}}{V_{RL} \text{ avg.}} \times 100$$

MAX VOLTS

MIN VOLTS

NOTES:

Reploma Radio Test Method 5/1/1

BEGIN SCAN GROUP 1 14 JAN 88 13:30:25
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	783.83	DEG.	F
C	2	EXHAUST 2	823.25	DEG.	F
C	3	EXHAUST 3	839.62	DEG.	F
C	4	EXHAUST 4	826.51	DEG.	F
C	5	EXHAUST 5	823.51	DEG.	F
C	6	EXHAUST 6	745.94	DEG.	F
C	7	ENG. COOL. IN	283.73	DEG.	F
C	8	ENG. COOL. OUT	218.94	DEG.	F
C	9	OIL SUMP	248.64	DEG.	F
C	10	OIL GALLERY	243.78	DEG.	F
C	13	ENG. INTAKE	135.78	DEG.	F
C	14	RAD. TOP LEFT	153.35	DEG.	F
C	15	RAD. BTM LEFT	158.76	DEG.	F
C	16	RAD. TOP RIGHT	153.52	DEG.	F
C	17	RAD. BTM RIGHT	154.73	DEG.	F
C	18	GEN. AIR IN	122.65	DEG.	F
C	19	GEN. AIR OUT	167.89	DEG.	F
C	20	GEN. FRAME TOP	132.78	DEG.	F
C	21	GEN. FRAME BTM	142.42	DEG.	F
C	22	GEN. EXCITER	137.78	DEG.	F
C	23	GEN. VOLT. REG.	137.25	DEG.	F
C	24	CONTROL PANEL	138.67	DEG.	F
C	25	RELAY AREA	122.88	DEG.	F
C	26	BATTERY LEFT	148.23	DEG.	F
C	27	BATTERY RIGHT	138.76	DEG.	F
C	28	AIR IN SET	125.72	DEG.	F
C	29	FUEL TANK	127.48	DEG.	F
C	30	FUEL OUTLET	158.28	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:30:34

STOPPED SINGLE SCAN 14 JAN 88 13:30:35

BEGIN SCAN GROUP 1 14 JAN 88 13:40:44
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	794.77	DEG.	F
C	2	EXHAUST 2	838.24	DEG.	F
C	3	EXHAUST 3	856.72	DEG.	F
C	4	EXHAUST 4	845.33	DEG.	F
C	5	EXHAUST 5	858.52	DEG.	F
C	6	EXHAUST 6	778.52	DEG.	F
C	7	ENG. COOL. IN	289.84	DEG.	F
C	8	ENG. COOL. OUT	216.72	DEG.	F
C	9	OIL SUMP	248.85	DEG.	F
C	10	OIL GALLERY	247.21	DEG.	F
C	13	ENG. INTAKE	136.84	DEG.	F
C	14	RAD. TOP LEFT	157.16	DEG.	F
C	15	RAD. BTM LEFT	153.54	DEG.	F
C	16	RAD. TOP RIGHT	154.39	DEG.	F
C	17	RAD. BTM RIGHT	153.74	DEG.	F
C	18	GEN. AIR IN	124.26	DEG.	F
C	19	GEN. AIR OUT	169.52	DEG.	F
C	20	GEN. FRAME TOP	135.34	DEG.	F
C	21	GEN. FRAME BTM	141.34	DEG.	F
C	22	GEN. EXCITER	148.89	DEG.	F
C	23	GEN. VOLT. REG.	138.46	DEG.	F
C	24	CONTROL PANEL	137.73	DEG.	F
C	25	RELAY AREA	122.57	DEG.	F
C	26	BATTERY LEFT	148.33	DEG.	F
C	27	BATTERY RIGHT	138.87	DEG.	F
C	28	AIR IN SET	127.14	DEG.	F
C	29	FUEL TANK	128.58	DEG.	F
C	30	FUEL OUTLET	148.58	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:40:53

STOPPED SINGLE SCAN 14 JAN 88 13:40:53

BEGIN SCAN GROUP 1 14 JAN 88 13:50:00
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	793.13	DEG.	F
C	2	EXHAUST 2	838.58	DEG.	F
C	3	EXHAUST 3	851.62	DEG.	F
C	4	EXHAUST 4	843.92	DEG.	F
C	5	EXHAUST 5	856.46	DEG.	F
C	6	EXHAUST 6	768.47	DEG.	F
C	7	ENG. COOL. IN	288.48	DEG.	F
C	8	ENG. COOL. OUT	216.43	DEG.	F
C	9	OIL SUMP	249.55	DEG.	F
C	10	OIL GALLERY	245.88	DEG.	F
C	13	ENG. INTAKE	134.97	DEG.	F
C	14	RAD. TOP LEFT	155.93	DEG.	F
C	15	RAD. BTM LEFT	153.81	DEG.	F
C	16	RAD. TOP RIGHT	153.29	DEG.	F
C	17	RAD. BTM RIGHT	154.81	DEG.	F
C	18	GEN. AIR IN	121.88	DEG.	F
C	19	GEN. AIR OUT	168.93	DEG.	F
C	20	GEN. FRAME TOP	135.24	DEG.	F
C	21	GEN. FRAME BTM	148.26	DEG.	F
C	22	GEN. EXCITER	135.42	DEG.	F
C	23	GEN. VOLT. REG.	138.84	DEG.	F
C	24	CONTROL PANEL	137.71	DEG.	F
C	25	RELAY AREA	121.37	DEG.	F
C	26	BATTERY LEFT	148.88	DEG.	F
C	27	BATTERY RIGHT	137.98	DEG.	F
C	28	AIR IN SET	124.23	DEG.	F
C	29	FUEL TANK	129.68	DEG.	F
C	30	FUEL OUTLET	149.62	DEG.	F

END SCAN GROUP 1 14 JAN 88 13:50:18

STOPPED SINGLE SCAN 14 JAN 88 13:50:18

BEGIN SCAN GROUP 1 14 JAN 88 14:00:05
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	795.63	DEG.	F
C	2	EXHAUST 2	835.26	DEG.	F
C	3	EXHAUST 3	858.89	DEG.	F
C	4	EXHAUST 4	849.38	DEG.	F
C	5	EXHAUST 5	853.87	DEG.	F
C	6	EXHAUST 6	773.21	DEG.	F
C	7	ENG. COOL. IN	289.98	DEG.	F
C	8	ENG. COOL. OUT	217.27	DEG.	F
C	9	OIL SUMP	251.33	DEG.	F
C	10	OIL GALLERY	251.86	DEG.	F
C	13	ENG. INTAKE	136.98	DEG.	F
C	14	RAD. TOP LEFT	156.17	DEG.	F
C	15	RAD. BTM LEFT	152.87	DEG.	F
C	16	RAD. TOP RIGHT	155.22	DEG.	F
C	17	RAD. BTM RIGHT	156.78	DEG.	F
C	18	GEN. AIR IN	123.15	DEG.	F
C	19	GEN. AIR OUT	169.57	DEG.	F
C	20	GEN. FRAME TOP	133.23	DEG.	F
C	21	GEN. FRAME BTM	141.53	DEG.	F
C	22	GEN. EXCITER	148.28	DEG.	F
C	23	GEN. VOLT. REG.	137.18	DEG.	F
C	24	CONTROL PANEL	138.69	DEG.	F
C	25	RELAY AREA	122.44	DEG.	F
C	26	BATTERY LEFT	148.83	DEG.	F
C	27	BATTERY RIGHT	138.83	DEG.	F
C	28	AIR IN SET	125.84	DEG.	F
C	29	FUEL TANK	131.27	DEG.	F
C	30	FUEL OUTLET	148.93	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:00:14

STOPPED SINGLE SCAN 14 JAN 88 14:00:14

BEGIN SCAN GROUP 1 14 JAN 88 14:01:46
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	793.25	DEG.	F
C	2	EXHAUST 2	848.01	DEG.	F
C	3	EXHAUST 3	861.52	DEG.	F
C	4	EXHAUST 4	849.28	DEG.	F
C	5	EXHAUST 5	858.01	DEG.	F
C	6	EXHAUST 6	774.36	DEG.	F
C	7	ENG. COOL. IN	283.60	DEG.	F
C	8	ENG. COOL. OUT	217.52	DEG.	F
C	9	OIL SUMP	247.94	DEG.	F
C	10	OIL GALLERY	250.46	DEG.	F
C	13	ENG. INTAKE	136.49	DEG.	F
C	14	RAD. TOP LEFT	157.20	DEG.	F
C	15	RAD. BTM LEFT	153.62	DEG.	F
C	16	RAD. TOP RIGHT	155.43	DEG.	F
C	17	RAD. BTM RIGHT	156.59	DEG.	F
C	18	GEN. AIR IN	123.46	DEG.	F
C	19	GEN. AIR OUT	178.05	DEG.	F
C	20	GEN. FRAME TOP	133.79	DEG.	F
C	21	GEN. FRAME BTM	141.75	DEG.	F
C	22	GEN. EXCITER	148.89	DEG.	F
C	23	GEN. VOLT. REG.	137.61	DEG.	F
C	24	CONTROL PANEL	138.38	DEG.	F
C	25	RELAY AREA	122.38	DEG.	F
C	26	BATTERY LEFT	141.17	DEG.	F
C	27	BATTERY RIGHT	139.06	DEG.	F
C	28	AIR IN SET	126.97	DEG.	F
C	29	FUEL TANK	131.32	DEG.	F
C	30	FUEL OUTLET	148.23	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:01:55

STOPPED SINGLE SCAN 14 JAN 88 14:01:56

BEGIN SCAN GROUP 1 14 JAN 88 14:03:46
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	426.21	DEG.	F
C	2	EXHAUST 2	477.50	DEG.	F
C	3	EXHAUST 3	493.91	DEG.	F
C	4	EXHAUST 4	485.09	DEG.	F
C	5	EXHAUST 5	495.15	DEG.	F
C	6	EXHAUST 6	435.98	DEG.	F
C	7	ENG. COOL. IN	283.20	DEG.	F
C	8	ENG. COOL. OUT	218.15	DEG.	F
C	9	OIL SUMP	OPEN TC		
C	10	OIL GALLERY	249.96	DEG.	F
C	13	ENG. INTAKE	136.62	DEG.	F
C	14	RAD. TOP LEFT	155.15	DEG.	F
C	15	RAD. BTM LEFT	152.13	DEG.	F
C	16	RAD. TOP RIGHT	153.63	DEG.	F
C	17	RAD. BTM RIGHT	155.29	DEG.	F
C	18	GEN. AIR IN	123.54	DEG.	F
C	19	GEN. AIR OUT	168.59	DEG.	F
C	20	GEN. FRAME TOP	135.11	DEG.	F
C	21	GEN. FRAME BTM	141.52	DEG.	F
C	22	GEN. EXCITER	148.65	DEG.	F
C	23	GEN. VOLT. REG.	137.95	DEG.	F
C	24	CONTROL PANEL	138.68	DEG.	F
C	25	RELAY AREA	122.68	DEG.	F
C	26	BATTERY LEFT	148.94	DEG.	F
C	27	BATTERY RIGHT	138.78	DEG.	F
C	28	AIR IN SET	124.88	DEG.	F
C	29	FUEL TANK	131.68	DEG.	F
C	30	FUEL OUTLET	149.19	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:03:55

STOPPED SINGLE SCAN 14 JAN 88 14:03:55

BEGIN SCAN GROUP 1 14 JAN 88 14:05:43
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	413.02	DEG.	F
C	2	EXHAUST 2	455.03	DEG.	F
C	3	EXHAUST 3	457.18	DEG.	F
C	4	EXHAUST 4	461.99	DEG.	F
C	5	EXHAUST 5	475.74	DEG.	F
C	6	EXHAUST 6	422.30	DEG.	F
C	7	ENG. COOL. IN	153.80	DEG.	F
C	8	ENG. COOL. OUT	200.10	DEG.	F
C	9	OIL SUMP	OPEN TC		
C	10	OIL GALLERY	247.18	DEG.	F
C	13	ENG. INTAKE	135.48	DEG.	F
C	14	RAD. TOP LEFT	151.42	DEG.	F
C	15	RAD. BTM LEFT	148.99	DEG.	F
C	16	RAD. TOP RIGHT	150.94	DEG.	F
C	17	RAD. BTM RIGHT	152.72	DEG.	F
C	18	GEN. AIR IN	123.66	DEG.	F
C	19	GEN. AIR OUT	167.83	DEG.	F
C	20	GEN. FRAME TOP	134.90	DEG.	F
C	21	GEN. FRAME BTM	140.83	DEG.	F
C	22	GEN. EXCITER	140.23	DEG.	F
C	23	GEN. VOLT. REG.	138.01	DEG.	F
C	24	CONTROL PANEL	138.59	DEG.	F
C	25	RELAY AREA	122.88	DEG.	F
C	26	BATTERY LEFT	140.68	DEG.	F
C	27	BATTERY RIGHT	138.42	DEG.	F
C	28	AIR IN SET	126.68	DEG.	F
C	29	FUEL TANK	131.65	DEG.	F
C	30	FUEL OUTLET	150.85	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:05:52

STOPPED SINGLE SCAN 14 JAN 88 14:05:52

BEGIN SCAN GROUP 1 14 JAN 88 14:08:28
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	782.04	DEG.	F
C	2	EXHAUST 2	821.06	DEG.	F
C	3	EXHAUST 3	837.75	DEG.	F
C	4	EXHAUST 4	826.82	DEG.	F
C	5	EXHAUST 5	836.80	DEG.	F
C	6	EXHAUST 6	757.51	DEG.	F
C	7	ENG. COOL. IN	156.41	DEG.	F
C	8	ENG. COOL. OUT	202.91	DEG.	F
C	9	OIL SUMP	242.57	DEG.	F
C	10	OIL GALLERY	243.84	DEG.	F
C	13	ENG. INTAKE	132.88	DEG.	F
C	14	RAD. TOP LEFT	149.72	DEG.	F
C	15	RAD. BTM LEFT	146.03	DEG.	F
C	16	RAD. TOP RIGHT	158.81	DEG.	F
C	17	RAD. BTM RIGHT	151.66	DEG.	F
C	18	GEN. AIR IN	122.25	DEG.	F
C	19	GEN. AIR OUT	169.20	DEG.	F
C	20	GEN. FRAME TOP	133.06	DEG.	F
C	21	GEN. FRAME BTM	140.83	DEG.	F
C	22	GEN. EXCITER	139.77	DEG.	F
C	23	GEN. VOLT. REG.	137.72	DEG.	F
C	24	CONTROL PANEL	138.03	DEG.	F
C	25	RELAY AREA	122.46	DEG.	F
C	26	BATTERY LEFT	148.58	DEG.	F
C	27	BATTERY RIGHT	138.59	DEG.	F
C	28	AIR IN SET	125.22	DEG.	F
C	29	FUEL TANK	131.84	DEG.	F
C	30	FUEL OUTLET	149.53	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:08:37

STOPPED SINGLE SCAN 14 JAN 88 14:08:37

BEGIN SCAN GROUP 1 14 JAN 88 14:11:02
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	431.59	DEG.	F
C	2	EXHAUST 2	476.29	DEG.	F
C	3	EXHAUST 3	475.81	DEG.	F
C	4	EXHAUST 4	477.66	DEG.	F
C	5	EXHAUST 5	493.91	DEG.	F
C	6	EXHAUST 6	436.80	DEG.	F
C	7	ENG. COOL. IN	191.78	DEG.	F
C	8	ENG. COOL. OUT	197.98	DEG.	F
C	9	OIL SUMP	228.74	DEG.	F
C	10	OIL GALLERY	242.27	DEG.	F
C	13	ENG. INTAKE	132.62	DEG.	F
C	14	RAD. TOP LEFT	148.41	DEG.	F
C	15	RAD. BTM LEFT	145.79	DEG.	F
C	16	RAD. TOP RIGHT	145.32	DEG.	F
C	17	RAD. BTM RIGHT	158.68	DEG.	F
C	18	GEN. AIR IN	122.31	DEG.	F
C	19	GEN. AIR OUT	163.67	DEG.	F
C	20	GEN. FRAME TOP	133.79	DEG.	F
C	21	GEN. FRAME BTM	148.37	DEG.	F
C	22	GEN. EXCITER	133.41	DEG.	F
C	23	GEN. VOLT. REG.	137.29	DEG.	F
C	24	CONTROL PANEL	138.28	DEG.	F
C	25	RELAY AREA	122.34	DEG.	F
C	26	BATTERY LEFT	139.72	DEG.	F
C	27	BATTERY RIGHT	137.79	DEG.	F
C	28	AIR IN SET	124.84	DEG.	F
C	29	FUEL TANK	132.89	DEG.	F
C	30	FUEL OUTLET	149.89	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:11:11

STOPPED SINGLE SCAN 14 JAN 88 14:11:11

BEGIN SCAN GROUP 1 14 JAN 88 14:13:18
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	882.94	DEG.	F
C	2	EXHAUST 2	846.33	DEG.	F
C	3	EXHAUST 3	855.81	DEG.	F
C	4	EXHAUST 4	858.86	DEG.	F
C	5	EXHAUST 5	864.57	DEG.	F
C	6	EXHAUST 6	789.47	DEG.	F
C	7	ENG. COOL. IN	193.42	DEG.	F
C	8	ENG. COOL. OUT	208.84	DEG.	F
C	9	OIL SUMP	248.23	DEG.	F
C	10	OIL GALLERY	239.88	DEG.	F
C	13	ENG. INTAKE	138.98	DEG.	F
C	14	RAD. TOP LEFT	148.19	DEG.	F
C	15	RAD. BTM LEFT	145.58	DEG.	F
C	16	RAD. TOP RIGHT	149.89	DEG.	F
C	17	RAD. BTM RIGHT	158.85	DEG.	F
C	18	GEN. AIR IN	121.71	DEG.	F
C	19	GEN. AIR OUT	171.97	DEG.	F
C	20	GEN. FRAME TOP	132.45	DEG.	F
C	21	GEN. FRAME BTM	148.73	DEG.	F
C	22	GEN. EXCITER	135.12	DEG.	F
C	23	GEN. VOLT. REG.	137.26	DEG.	F
C	24	CONTROL PANEL	137.53	DEG.	F
C	25	RELAY AREA	121.78	DEG.	F
C	26	BATTERY LEFT	139.68	DEG.	F
C	27	BATTERY RIGHT	137.79	DEG.	F
C	28	AIR IN SET	122.73	DEG.	F
C	29	FUEL TANK	131.97	DEG.	F
C	30	FUEL OUTLET	158.83	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:13:28

STOPPED SINGLE SCAN 14 JAN 88 14:13:28

BEGIN SCAN GROUP 1 14 JAN 88 14:56:24
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	778.48	DEG.	F
C	2	EXHAUST 2	825.13	DEG.	F
C	3	EXHAUST 3	839.45	DEG.	F
C	4	EXHAUST 4	838.14	DEG.	F
C	5	EXHAUST 5	847.81	DEG.	F
C	6	EXHAUST 6	774.26	DEG.	F
C	7	ENG. COOL. IN	192.88	DEG.	F
C	8	ENG. COOL. OUT	199.17	DEG.	F
C	9	OIL SUMP	248.47	DEG.	F
C	10	OIL GALLERY	239.78	DEG.	F
C	13	ENG. INTAKE	134.78	DEG.	F
C	14	RAD. TOP LEFT	149.28	DEG.	F
C	15	RAD. BTM LEFT	146.75	DEG.	F
C	16	RAD. TOP RIGHT	149.88	DEG.	F
C	17	RAD. BTM RIGHT	151.49	DEG.	F
C	18	GEN. AIR IN	122.63	DEG.	F
C	19	GEN. AIR OUT	168.46	DEG.	F
C	20	GEN. FRAME TOP	133.97	DEG.	F
C	21	GEN. FRAME BTM	148.32	DEG.	F
C	22	GEN. EXCITER	139.93	DEG.	F
C	23	GEN. VOLT. REG.	135.83	DEG.	F
C	24	CONTROL PANEL	138.22	DEG.	F
C	25	RELAY AREA	124.18	DEG.	F
C	26	BATTERY LEFT	139.71	DEG.	F
C	27	BATTERY RIGHT	138.51	DEG.	F
C	28	AIR IN SET	123.98	DEG.	F
C	29	FUEL TANK	134.89	DEG.	F
C	30	FUEL OUTLET	148.76	DEG.	F

END SCAN GROUP 1 14 JAN 88 14:56:33

STOPPED SINGLE SCAN 14 JAN 88 14:56:33

BEGIN SCAN GROUP 1 14 JAN 88 15:00:09
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	769.82	DEG.	F
C	2	EXHAUST 2	814.47	DEG.	F
C	3	EXHAUST 3	839.84	DEG.	F
C	4	EXHAUST 4	822.19	DEG.	F
C	5	EXHAUST 5	823.77	DEG.	F
C	6	EXHAUST 6	717.11	DEG.	F
C	7	ENG. COOL. IN	208.89	DEG.	F
C	8	ENG. COOL. OUT	208.31	DEG.	F
C	9	OIL SUMP	236.47	DEG.	F
C	10	OIL GALLERY	241.68	DEG.	F
C	13	ENG. INTAKE	134.16	DEG.	F
C	14	RAD. TOP LEFT	151.76	DEG.	F
C	15	RAD. BTM LEFT	148.88	DEG.	F
C	16	RAD. TOP RIGHT	152.21	DEG.	F
C	17	RAD. BTM RIGHT	153.54	DEG.	F
C	18	GEN. AIR IN	122.96	DEG.	F
C	19	GEN. AIR OUT	171.86	DEG.	F
C	20	GEN. FRAME TOP	132.92	DEG.	F
C	21	GEN. FRAME BTM	141.97	DEG.	F
C	22	GEN. EXCITER	138.84	DEG.	F
C	23	GEN. VOLT. REG.	135.29	DEG.	F
C	24	CONTROL PANEL	138.26	DEG.	F
C	25	RELAY AREA	122.72	DEG.	F
C	26	BATTERY LEFT	148.48	DEG.	F
C	27	BATTERY RIGHT	139.25	DEG.	F
C	28	AIR IN SET	125.43	DEG.	F
C	29	FUEL TANK	134.98	DEG.	F
C	30	FUEL OUTLET	149.21	DEG.	F

END SCAN GROUP 1 14 JAN 88 15:00:18

STOPPED SINGLE SCAN 14 JAN 88 15:00:18

BEGIN SCAN GROUP 1 14 JAN 88 15:02:08
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	419.68	DEG.	F
C	2	EXHAUST 2	471.83	DEG.	F
C	3	EXHAUST 3	477.02	DEG.	F
C	4	EXHAUST 4	479.19	DEG.	F
C	5	EXHAUST 5	498.31	DEG.	F
C	6	EXHAUST 6	423.72	DEG.	F
C	7	ENG. COOL. IN	190.32	DEG.	F
C	8	ENG. COOL. OUT	205.07	DEG.	F
C	9	OIL SUMP	218.02	DEG.	F
C	10	OIL GALLERY	241.21	DEG.	F
C	13	ENG. INTAKE	133.89	DEG.	F
C	14	RAD. TOP LEFT	151.68	DEG.	F
C	15	RAD. BTM LEFT	148.57	DEG.	F
C	16	RAD. TOP RIGHT	151.43	DEG.	F
C	17	RAD. BTM RIGHT	152.67	DEG.	F
C	18	GEN. AIR IN	122.55	DEG.	F
C	19	GEN. AIR OUT	169.82	DEG.	F
C	20	GEN. FRAME TOP	134.26	DEG.	F
C	21	GEN. FRAME BTM	141.27	DEG.	F
C	22	GEN. EXCITER	138.82	DEG.	F
C	23	GEN. VOLT. REG.	136.34	DEG.	F
C	24	CONTROL PANEL	138.85	DEG.	F
C	25	RELAY AREA	122.38	DEG.	F
C	26	BATTERY LEFT	148.43	DEG.	F
C	27	BATTERY RIGHT	138.99	DEG.	F
C	28	AIR IN SET	124.55	DEG.	F
C	29	FUEL TANK	134.84	DEG.	F
C	30	FUEL OUTLET	147.83	DEG.	F

END SCAN GROUP 1 14 JAN 88 15:02:17

STOPPED SINGLE SCAN 14 JAN 88 15:02:17

BEGIN SCAN GROUP 1 14 JAN 88 15:05:10
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	371.23	DEG.	F
C	2	EXHAUST 2	424.48	DEG.	F
C	3	EXHAUST 3	428.73	DEG.	F
C	4	EXHAUST 4	424.14	DEG.	F
C	5	EXHAUST 5	438.23	DEG.	F
C	6	EXHAUST 6	372.49	DEG.	F
C	7	ENG. COOL. IN	186.82	DEG.	F
C	8	ENG. COOL. OUT	192.26	DEG.	F
C	9	OIL SUMP	244.18	DEG.	F
C	10	OIL GALLERY	238.15	DEG.	F
C	13	ENG. INTAKE	132.88	DEG.	F
C	14	RAD. TOP LEFT	146.78	DEG.	F
C	15	RAD. BTM LEFT	144.39	DEG.	F
C	16	RAD. TOP RIGHT	147.81	DEG.	F
C	17	RAD. BTM RIGHT	149.22	DEG.	F
C	18	GEN. AIR IN	122.81	DEG.	F
C	19	GEN. AIR OUT	165.98	DEG.	F
C	20	GEN. FRAME TOP	132.86	DEG.	F
C	21	GEN. FRAME BTM	139.83	DEG.	F
C	22	GEN. EXCITER	138.34	DEG.	F
C	23	GEN. VOLT. REG.	136.27	DEG.	F
C	24	CONTROL PANEL	137.63	DEG.	F
C	25	RELAY AREA	122.12	DEG.	F
C	26	BATTERY LEFT	148.83	DEG.	F
C	27	BATTERY RIGHT	138.99	DEG.	F
C	28	AIR IN SET	123.61	DEG.	F
C	29	FUEL TANK	134.87	DEG.	F
C	30	FUEL OUTLET	149.88	DEG.	F

END SCAN GROUP 1 14 JAN 88 15:05:20

STOPPED SINGLE SCAN 14 JAN 88 15:05:20

ITEM 30Kw/4042

GENERATOR SET

MODIFIED

MPGR. GARY WELDMG

MODEL NO. MGA111A

SERIAL NO. R34 0323



National
Technical
Systems

Scientific
Services
Group

Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705; 513.2

SHEET 1 OF 2

DATE 14 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER KM/GC

TEST DATA

INDICATING INSTRUMENT TEST (ELECTRICAL)

MASTER INSTRUMENTS

INST TIME	STEP NO.	LOAD STEP	E6023 VOLTAGE			E6040 AMPERES X 10			E6230 KILOWATTS X 10			POWER FACTOR	FREQ. Hz	E61670 EXCITER FIELD		AMB. TEMP. °F
			L1- VAC	L2- VAC	L3- VAC	L1- AC RMS	L2- AC RMS	L3- AC RMS	L1- KW	L2- KW	L3- KW			VOLTS VDC	AMPS ACA	
1647			120	120	120	0	0	0	0	0	0	0	400	10.1	3.8	123
1657		NIL	120	120	120	0	0	0	0	0	0	0	390.5	11.2	4.15	124
1707		NIL	120	120	120.1	0	0	0	0	0	0	0	412	9.8	3.6	124
1706		NIL	119.9	119.9	119.9	0	0	0	0	0	0	0	400	11.6	4.25	126
1708		1/4	119.1	119.5	119.5	1.7	1.7	1.7	.062	.063	.063	.80	400	12.6	4.6	126
1711		1/2	119	119.1	119.1	1.31	1.32	1.32	.123	.125	.125	.80	400	13.8	5.0	123
1713		3/4	118.5	119	119	1.96	1.97	1.97	.181	.189	.189	.80	400	15.3	5.5	126
1716		4/4	118	118.5	118.5	2.62	2.64	2.64	.25	.252	.252	.80	400			
1717			END OF TEST													

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NOTES:

TEST DATA



ITEM 30 Kw/400 Hz

GENERATOR SET

MODIFIED

MPGR. LIBBY WELDING

MODEL NO. MEP 114A

SERIAL NO. RZ40323

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705; 513.2

SHEET 2 OF 2

DATE 14 Jan 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER KM/GC

INDICATING INSTRUMENT TEST (ELECTRICAL)

PANEL INSTRUMENTS

INST TIME	STEP NO.	LOAD STEP	VOLTAGE			AMPERES			KILOWATTS			POWER FACTOR PF	FREQ. Hz	Z LOAD			AMB TEMR °F
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0			L1-L0	L2-L0	L3-L0	
			VAC	VAC	VAC	AC AMPS	AC AMPS	AC AMPS	Kw	Kw	Kw						
1647			ZEROED GAUGES														
1650			STARTED SET														
1651		N/A	119.9	119.9	119.9	0	0	0	N/A	N/A	N/A	N/A	398	0	0	0	123
1704			119.5	119.5	119.5	0	0	0	N/A	N/A	N/A	N/A	399	0	0	0	124
1706			120	120	120	0	0	0	N/A	N/A	N/A	N/A	410	0	0	0	124
1708		.25	119.9	119.9	119.9	30	30	30	N/A	N/A	N/A	N/A	398	29	29	29	126
1711		.50	120	120	120	53	54	54	N/A	N/A	N/A	N/A	398	52	52	52	126
1713		.75	119.5	120	120	79	80	80	N/A	N/A	N/A	N/A	398	77	77	77	123
1716		R/A	119.5	120	120	101	102	102	N/A	N/A	N/A	N/A	398	105	105	105	126
1717		END OF TEST															

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NOTES:

RECORDED/OBSERVER *RS.*

**Testing Division
P.O. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300**

**Scientific
Services
Group**

**National
Technical
Systems**

Panel Instrument Test

Method 513.2 (Computation Results)

30 Kw 400 Hz

GENERATOR SET

MODIFIED

LIBBY WELDON

MODEL NO. ME8114A

SERIAL NO. R240823

[illegible]

B-315

2010

TEST DATA

ITEM 30KW / 400 HzGENERATOR SETMODIFIEDMFCR. LIBBY WELSHMODEL NO. MP 1144SERIAL NO. RZ4 0323**NAS**National
Technical
SystemsScientific
Services
GroupTesting Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705: 60R.2

SHEET 1 OF 2DATE 15 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER KM/CCFREQUENCY AND VOLTAGE STABILITY TEST
(LONG TERM)

INST LINE	STEP NO.	LOAD STEP	E-6023 0 VOLTAGE				E-6040 0 AMPERES X40				E-6230 0 KILOWATTS X40				POWER FACTOR	FREQ. Hz	E-6120 0 VOLTS		AMPS DCA	TEMP. °F
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	AC AMPS L1-L0	AC AMPS L2-L0	AC AMPS L3-L0	AC AMPS L1-L0	AC AMPS L2-L0	AC AMPS L3-L0	Kw	Kw	Kw	PF		VDC	VDC		
06029			START - 120V				START - 120V				START - 120V									
06030			APPROX 120V				APPROX 120V				APPROX 120V									
06031		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.5	15.4	5.65	125	126
06032		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.2	16.2	5.8	125	126
06033		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.2	16.5	5.85	125	126
06034		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.3	16.6	5.85	125	126
06035		RL	120	120.1	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.3	16.6	5.9	125	126
06036		RL	START - 120V				START - 120V				START - 120V									
06037		RL	120	120.1	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.3	16.7	5.9	125	126
06038		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.4	16.8	5.9	125	126
06039		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.7	5.9	125	126
06040		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.7	5.85	125	126
06041		RL	120	120.1	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.5	16.8	5.9	125	126
06042		RL	120	120.1	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.7	16.8	5.9	125	126
06043		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.6	16.8	5.9	125	126
06044		RL	119.5	120	120	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.8	16.9	5.9	125	126
06045		RL	REMOVED 120V				REMOVED 120V				REMOVED 120V									
06046		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.7	11.0	4.0	124	124
06047		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.7	12.9	4.0	126	126
06048		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.8	12.8	4.0	123	123
06049		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.8	12.8	4.0	125	125
06050		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.9	12.8	4.0	126	126
06051		RL	START - 120V				START - 120V				START - 120V									
06052		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.9	10.9	4.0	125	125
06053		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.8	10.8	4.0	125	125
06054		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.8	10.8	4.0	124	124
06055		RL	121.5	121.5	121.5	2.6	2.6	2.6	2.6	2.6	2.6	.25	.25	.25	.80	400.8	10.8	4.0	125	125

NOTES:

NTS

REF. NO. HIL-STD 705: 608.2

SHEET 2 OF 2

DATE 15 JAN. 1985

JOB NO. 555-2140

PROJ. ENGR.

RECORDED/OBSERVER KM/GC

Testing Division

P.O. Box 38

P.O. Box 38

Halwood, Virginia 22471

Tel: 703 752 5300

Scientific

Services

Gross

National

Technical

Systems

MODEL NO. *Map 114A*

SERIAL NO. 274 0323

FREQUENCY AND VOLTAGE STABILITY TEST
(LONG TERM)

[illegible]

NOTES:

TEST DATA

ITEM 30 Kw 400 Hz

GEN SET

MODIFIED

HFCR. LIBBY WECOMG

MODEL NO. MFR 1141

SERIAL NO. R24 0323

MTS

National
Technical
Systems

Scientific
Services
Group

Testing Division
PO Box 38
Hartwood, Virginia 22471

FREQUENCY AND VOLTAGE STABILITY
tel: 703 752 5300

REF. NO. MIL-STD-705

SHEET 1 OF 1

DATE 25 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER RS

FREQUENCY

VOLTAGE

LOAD STEP	MAXIMUM EXCURSION		CONSTANT LOAD		REGULATION		MAXIMUM EXCURSION		UNDER SHOOT		REC. TIME		CONSTANT LOAD	
	OVERSHOOT Hz	UNDER SHOOT Hz	BANDWIDTH ± Hz	± %	FREQ. %	VOLT %	OVERSHOOT VOLT	± %	VOLT	± %	SEC	± WLT	± WLT	± %
R/L	SHORT TERM STABILITY													
R/L	LONG TERM STABILITY													
N/L	SHORT TERM STABILITY													
N/L	LONG TERM STABILITY													
1-2	2.6	.65	.26	.07	.05	1.25	1.39	1.16			.31	.17	.15	
2-3			.17	.04	.035	1.25			1.56	1.30	.23	.17	.15	
3-4	1.88	.47	.17	.04	.05	1.25	1.39	1.16			.31	.17	.15	
4-5			.26	.07	.035	1.25			1.24	1.45	.31	.17	.15	
5-6	2.6	.65	.17	.04	.0	1.25	1.39	1.16			.31	.17	.15	

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VOLTAGE REGULATION EXCEEDED 17

NOTES:

LOW TEAM 6081

BEGIN SCAN GROUP 1 15 JAN 88 06:40:24
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	797.83	DEG.	F
C	2	EXHAUST 2	839.18	DEG.	F
C	3	EXHAUST 3	864.91	DEG.	F
C	4	EXHAUST 4	856.42	DEG.	F
C	5	EXHAUST 5	871.16	DEG.	F
C	6	EXHAUST 6	799.63	DEG.	F
C	7	ENG. COOL. IN	196.13	DEG.	F
C	8	ENG. COOL. OUT	204.06	DEG.	F
C	9	OIL SUMP	161.66	DEG.	F
C	10	OIL GALLERY	202.09	DEG.	F
C	13	ENG. INTAKE	135.50	DEG.	F
C	14	RAD. TOP LEFT	149.85	DEG.	F
C	15	RAD. BTM LEFT	148.49	DEG.	F
C	16	RAD. TOP RIGHT	142.86	DEG.	F
C	17	RAD. BTM RIGHT	143.73	DEG.	F
C	18	GEN. AIR IN	122.37	DEG.	F
C	19	GEN. AIR OUT	141.67	DEG.	F
C	20	GEN. FRAME TOP	125.48	DEG.	F
C	21	GEN. FRAME BTM	125.80	DEG.	F
C	22	GEN. EXCITER	132.65	DEG.	F
C	23	GEN. VOLT. REG.	111.71	DEG.	F
C	24	CONTROL PANEL	114.03	DEG.	F
C	25	RELAY AREA	113.91	DEG.	F
C	26	BATTERY LEFT	115.17	DEG.	F
C	27	BATTERY RIGHT	113.66	DEG.	F
C	28	AIR IN SET	125.31	DEG.	F
C	29	FUEL TANK	94.955	DEG.	F
C	30	FUEL OUTLET	120.73	DEG.	F

END SCAN GROUP 1 15 JAN 88 06:40:34

STOPPED SINGLE SCAN 15 JAN 88 06:40:34

BEGIN SCAN GROUP 1 15 JAN 88 06:50:18
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	811.07	DEG.	F
C	2	EXHAUST 2	849.30	DEG.	F
C	3	EXHAUST 3	860.73	DEG.	F
C	4	EXHAUST 4	861.74	DEG.	F
C	5	EXHAUST 5	865.59	DEG.	F
C	6	EXHAUST 6	785.04	DEG.	F
C	7	ENG. COOL. IN	204.82	DEG.	F
C	8	ENG. COOL. OUT	212.97	DEG.	F
C	9	OIL SUMP	170.54	DEG.	F
C	10	OIL GALLERY	229.14	DEG.	F
C	13	ENG. INTAKE	138.15	DEG.	F
C	14	RAD. TOP LEFT	154.92	DEG.	F
C	15	RAD. BTM LEFT	152.74	DEG.	F
C	16	RAD. TOP RIGHT	149.93	DEG.	F
C	17	RAD. BTM RIGHT	151.81	DEG.	F
C	18	GEN. AIR IN	123.68	DEG.	F
C	19	GEN. AIR OUT	152.72	DEG.	F
C	20	GEN. FRAME TOP	131.32	DEG.	F
C	21	GEN. FRAME BTM	133.21	DEG.	F
C	22	GEN. EXCITER	138.57	DEG.	F
C	23	GEN. VOLT. REG.	123.74	DEG.	F
C	24	CONTROL PANEL	126.67	DEG.	F
C	25	RELAY AREA	120.53	DEG.	F
C	26	BATTERY LEFT	125.36	DEG.	F
C	27	BATTERY RIGHT	124.55	DEG.	F
C	28	AIR IN SET	126.38	DEG.	F
C	29	FUEL TANK	97.372	DEG.	F
C	30	FUEL OUTLET	135.13	DEG.	F

END SCAN GROUP 1 15 JAN 88 06:50:27

STOPPED SINGLE SCAN 15 JAN 88 06:50:27

BEGIN SCAN GROUP 1 15 JAN 88 07:00:24
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	817.72	DEG.	F
C	2	EXHAUST 2	858.45	DEG.	F
C	3	EXHAUST 3	868.69	DEG.	F
C	4	EXHAUST 4	864.52	DEG.	F
C	5	EXHAUST 5	864.18	DEG.	F
C	6	EXHAUST 6	782.50	DEG.	F
C	7	ENG. COOL. IN	209.49	DEG.	F
C	8	ENG. COOL. OUT	216.98	DEG.	F
C	9	OIL SUMP	167.29	DEG.	F
C	10	OIL GALLERY	241.95	DEG.	F
C	13	ENG. INTAKE	139.93	DEG.	F
C	14	RAD. TOP LEFT	156.48	DEG.	F
C	15	RAD. BTM LEFT	153.21	DEG.	F
C	16	RAD. TOP RIGHT	152.65	DEG.	F
C	17	RAD. BTM RIGHT	154.68	DEG.	F
C	18	GEN. AIR IN	123.70	DEG.	F
C	19	GEN. AIR OUT	158.92	DEG.	F
C	20	GEN. FRAME TOP	134.07	DEG.	F
C	21	GEN. FRAME BTM	136.85	DEG.	F
C	22	GEN. EXCITER	141.30	DEG.	F
C	23	GEN. VOLT. REG.	130.82	DEG.	F
C	24	CONTROL PANEL	134.24	DEG.	F
C	25	RELAY AREA	123.24	DEG.	F
C	26	BATTERY LEFT	131.38	DEG.	F
C	27	BATTERY RIGHT	130.65	DEG.	F
C	28	AIR IN SET	125.17	DEG.	F
C	29	FUEL TANK	106.10	DEG.	F
C	30	FUEL OUTLET	143.87	DEG.	F

END SCAN GROUP 1 15 JAN 88 07:00:34

STOPPED SINGLE SCAN 15 JAN 88 07:00:34

BEGIN SCAN GROUP 1 15 JAN 88 07:10:12
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	813.26	DEG.	F
C	2	EXHAUST 2	854.03	DEG.	F
C	3	EXHAUST 3	862.52	DEG.	F
C	4	EXHAUST 4	862.32	DEG.	F
C	5	EXHAUST 5	864.79	DEG.	F
C	6	EXHAUST 6	777.08	DEG.	F
C	7	ENG. COOL. IN	208.64	DEG.	F
C	8	ENG. COOL. OUT	216.09	DEG.	F
C	9	OIL SUMP	161.80	DEG.	F
C	10	OIL GALLERY	245.70	DEG.	F
C	13	ENG. INTAKE	137.48	DEG.	F
C	14	RAD. TOP LEFT	156.14	DEG.	F
C	15	RAD. BTM LEFT	152.99	DEG.	F
C	16	RAD. TOP RIGHT	152.80	DEG.	F
C	17	RAD. BTM RIGHT	154.69	DEG.	F
C	18	GEN. AIR IN	123.86	DEG.	F
C	19	GEN. AIR OUT	161.71	DEG.	F
C	20	GEN. FRAME TOP	133.24	DEG.	F
C	21	GEN. FRAME BTM	137.57	DEG.	F
C	22	GEN. EXCITER	139.67	DEG.	F
C	23	GEN. VOLT. REG.	132.83	DEG.	F
C	24	CONTROL PANEL	137.82	DEG.	F
C	25	RELAY AREA	120.56	DEG.	F
C	26	BATTERY LEFT	132.13	DEG.	F
C	27	BATTERY RIGHT	131.30	DEG.	F
C	28	AIR IN SET	126.19	DEG.	F
C	29	FUEL TANK	102.65	DEG.	F
C	30	FUEL OUTLET	144.87	DEG.	F

END SCAN GROUP 1 15 JAN 88 07:10:22

STOPPED SINGLE SCAN 15 JAN 88 07:10:22

BEGIN SCAN GROUP 1 15 JAN 88 07:16:16
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	813.83	DEG.	F
C	2	EXHAUST 2	854.57	DEG.	F
C	3	EXHAUST 3	867.38	DEG.	F
C	4	EXHAUST 4	867.70	DEG.	F
C	5	EXHAUST 5	864.28	DEG.	F
C	6	EXHAUST 6	778.90	DEG.	F
C	7	ENG. COOL. IN	209.27	DEG.	F
C	8	ENG. COOL. OUT	217.32	DEG.	F
C	9	OIL SUMP	196.58	DEG.	F
C	10	OIL GALLERY	248.38	DEG.	F
C	13	ENG. INTAKE	139.19	DEG.	F
C	14	RAD. TOP LEFT	156.70	DEG.	F
C	15	RAD. BTM LEFT	153.41	DEG.	F
C	16	RAD. TOP RIGHT	152.74	DEG.	F
C	17	RAD. BTM RIGHT	155.21	DEG.	F
C	18	GEN. AIR IN	123.39	DEG.	F
C	19	GEN. AIR OUT	163.54	DEG.	F
C	20	GEN. FRAME TOP	134.10	DEG.	F
C	21	GEN. FRAME BTM	139.74	DEG.	F
C	22	GEN. EXCITER	140.34	DEG.	F
C	23	GEN. VOLT. REG.	133.85	DEG.	F
C	24	CONTROL PANEL	137.26	DEG.	F
C	25	RELAY AREA	122.09	DEG.	F
C	26	BATTERY LEFT	134.41	DEG.	F
C	27	BATTERY RIGHT	132.50	DEG.	F
C	28	AIR IN SET	125.13	DEG.	F
C	29	FUEL TANK	104.24	DEG.	F
C	30	FUEL OUTLET	145.76	DEG.	F

END SCAN GROUP 1 15 JAN 88 07:16:26

STOPPED SINGLE SCAN 15 JAN 88 07:16:26

BEGIN SCAN GROUP 1 15 JAN 88 07:45:18
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	813.80	DEG.	F
C	2	EXHAUST 2	855.23	DEG.	F
C	3	EXHAUST 3	867.54	DEG.	F
C	4	EXHAUST 4	867.34	DEG.	F
C	5	EXHAUST 5	867.17	DEG.	F
C	6	EXHAUST 6	783.01	DEG.	F
C	7	ENG. COOL. IN	209.24	DEG.	F
C	8	ENG. COOL. OUT	217.60	DEG.	F
C	9	OIL SUMP	196.07	DEG.	F
C	10	OIL GALLERY	258.38	DEG.	F
C	13	ENG. INTAKE	138.56	DEG.	F
C	14	RAD. TOP LEFT	157.09	DEG.	F
C	15	RAD. BTM LEFT	154.11	DEG.	F
C	16	RAD. TOP RIGHT	153.42	DEG.	F
C	17	RAD. BTM RIGHT	155.75	DEG.	F
C	18	GEN. AIR IN	123.50	DEG.	F
C	19	GEN. AIR OUT	167.63	DEG.	F
C	20	GEN. FRAME TOP	135.35	DEG.	F
C	21	GEN. FRAME BTM	139.79	DEG.	F
C	22	GEN. EXCITER	141.63	DEG.	F
C	23	GEN. VOLT. REG.	137.93	DEG.	F
C	24	CONTROL PANEL	139.74	DEG.	F
C	25	RELAY AREA	121.35	DEG.	F
C	26	BATTERY LEFT	136.07	DEG.	F
C	27	BATTERY RIGHT	133.73	DEG.	F
C	28	AIR IN SET	126.02	DEG.	F
C	29	FUEL TANK	109.95	DEG.	F
C	30	FUEL OUTLET	148.69	DEG.	F

END SCAN GROUP 1 15 JAN 88 07:45:28

STOPPED SINGLE SCAN 15 JAN 88 07:45:28

BEGIN SCAN GROUP 1 15 JAN 88 08:15:12
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	815.30	DEG.	F
C	2	EXHAUST 2	859.27	DEG.	F
C	3	EXHAUST 3	871.66	DEG.	F
C	4	EXHAUST 4	868.30	DEG.	F
C	5	EXHAUST 5	873.01	DEG.	F
C	6	EXHAUST 6	783.30	DEG.	F
C	7	ENG. COOL. IN	210.98	DEG.	F
C	8	ENG. COOL. OUT	218.50	DEG.	F
C	9	OIL SUMP	175.18	DEG.	F
C	10	OIL GALLERY	249.30	DEG.	F
C	13	ENG. INTAKE	138.36	DEG.	F
C	14	RAD. TOP LEFT	157.00	DEG.	F
C	15	RAD. BTM LEFT	154.68	DEG.	F
C	16	RAD. TOP RIGHT	155.65	DEG.	F
C	17	RAD. BTM RIGHT	157.05	DEG.	F
C	18	GEN. AIR IN	123.62	DEG.	F
C	19	GEN. AIR OUT	169.64	DEG.	F
C	20	GEN. FRAME TOP	134.20	DEG.	F
C	21	GEN. FRAME BTM	141.79	DEG.	F
C	22	GEN. EXCITER	140.30	DEG.	F
C	23	GEN. VOLT. REG.	137.68	DEG.	F
C	24	CONTROL PANEL	140.23	DEG.	F
C	25	RELAY AREA	122.30	DEG.	F
C	26	BATTERY LEFT	138.57	DEG.	F
C	27	BATTERY RIGHT	134.88	DEG.	F
C	28	AIR IN SET	125.53	DEG.	F
C	29	FUEL TANK	116.40	DEG.	F
C	30	FUEL OUTLET	148.06	DEG.	F

END SCAN GROUP 1 15 JAN 88 08:15:21

STOPPED SINGLE SCAN 15 JAN 88 08:15:21

BEGIN SCAN GROUP 1 15 JAN 88 08:45:03
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	809.41	DEG.	F
C	2	EXHAUST 2	848.97	DEG.	F
C	3	EXHAUST 3	870.98	DEG.	F
C	4	EXHAUST 4	865.12	DEG.	F
C	5	EXHAUST 5	863.63	DEG.	F
C	6	EXHAUST 6	774.53	DEG.	F
C	7	ENG. COOL. IN	209.23	DEG.	F
C	8	ENG. COOL. OUT	216.74	DEG.	F
C	9	OIL SUMP	-57.345	DEG.	F
C	10	OIL GALLERY	249.66	DEG.	F
C	13	ENG. INTAKE	136.59	DEG.	F
C	14	RAD. TOP LEFT	156.58	DEG.	F
C	15	RAD. BTM LEFT	153.46	DEG.	F
C	16	RAD. TOP RIGHT	153.31	DEG.	F
C	17	RAD. BTM RIGHT	155.38	DEG.	F
C	18	GEN. AIR IN	123.66	DEG.	F
C	19	GEN. AIR OUT	169.14	DEG.	F
C	20	GEN. FRAME TOP	135.03	DEG.	F
C	21	GEN. FRAME BTM	140.05	DEG.	F
C	22	GEN. EXCITER	139.90	DEG.	F
C	23	GEN. VOLT. REG.	138.29	DEG.	F
C	24	CONTROL PANEL	138.34	DEG.	F
C	25	RELAY AREA	120.14	DEG.	F
C	26	BATTERY LEFT	139.33	DEG.	F
C	27	BATTERY RIGHT	136.91	DEG.	F
C	28	AIR IN SET	125.61	DEG.	F
C	29	FUEL TANK	120.46	DEG.	F
C	30	FUEL OUTLET	147.03	DEG.	F

END SCAN GROUP 1 15 JAN 88 08:45:13

STOPPED SINGLE SCAN 15 JAN 88 08:45:13

BEGIN SCAN GROUP 1 15 JAN 88 10:15:02
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	812.59	DEG.	F
C	2	EXHAUST 2	855.60	DEG.	F
C	3	EXHAUST 3	870.93	DEG.	F
C	4	EXHAUST 4	866.41	DEG.	F
C	5	EXHAUST 5	870.38	DEG.	F
C	6	EXHAUST 6	779.66	DEG.	F
C	7	ENG. COOL. IN	209.63	DEG.	F
C	8	ENG. COOL. OUT	217.21	DEG.	F
C	9	OIL SUMP		OPEN TO	
C	10	OIL GALLERY	249.01	DEG.	F
C	13	ENG. INTAKE	135.62	DEG.	F
C	14	RAD. TOP LEFT	155.45	DEG.	F
C	15	RAD. BTM LEFT	152.08	DEG.	F
C	16	RAD. TOP RIGHT	154.72	DEG.	F
C	17	RAD. BTM RIGHT	156.09	DEG.	F
C	18	GEN. AIR IN	122.39	DEG.	F
C	19	GEN. AIR OUT	169.61	DEG.	F
C	20	GEN. FRAME TOP	133.55	DEG.	F
C	21	GEN. FRAME BTM	148.26	DEG.	F
C	22	GEN. EXCITER	139.25	DEG.	F
C	23	GEN. VOLT. REG.	138.24	DEG.	F
C	24	CONTROL PANEL	139.56	DEG.	F
C	25	RELAY AREA	121.91	DEG.	F
C	26	BATTERY LEFT	141.17	DEG.	F
C	27	BATTERY RIGHT	139.56	DEG.	F
C	28	AIR IN SET	124.68	DEG.	F
C	29	FUEL TANK	132.70	DEG.	F
C	30	FUEL OUTLET	149.51	DEG.	F

END SCAN GROUP 1 15 JAN 88 10:15:12

STOPPED SINGLE SCAN 15 JAN 88 10:15:12

BEGIN SCAN GROUP 1 15 JAN 88 10:45:03
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	814.60	DEG.	F
C	2	EXHAUST 2	858.49	DEG.	F
C	3	EXHAUST 3	873.05	DEG.	F
C	4	EXHAUST 4	863.97	DEG.	F
C	5	EXHAUST 5	872.11	DEG.	F
C	6	EXHAUST 6	780.53	DEG.	F
C	7	ENG. COOL. IN	208.39	DEG.	F
C	8	ENG. COOL. OUT	217.17	DEG.	F
C	9	OIL SUMP	395.52	DEG.	F
C	10	OIL GALLERY	248.50	DEG.	F
C	13	ENG. INTAKE	135.08	DEG.	F
C	14	RAD. TOP LEFT	156.15	DEG.	F
C	15	RAD. BTM LEFT	152.50	DEG.	F
C	16	RAD. TOP RIGHT	155.04	DEG.	F
C	17	RAD. BTM RIGHT	156.10	DEG.	F
C	18	GEN. AIR IN	123.16	DEG.	F
C	19	GEN. AIR OUT	169.83	DEG.	F
C	20	GEN. FRAME TOP	134.35	DEG.	F
C	21	GEN. FRAME BTM	148.58	DEG.	F
C	22	GEN. EXCITER	139.14	DEG.	F
C	23	GEN. VOLT. REG.	137.71	DEG.	F
C	24	CONTROL PANEL	137.91	DEG.	F
C	25	RELAY AREA	120.96	DEG.	F
C	26	BATTERY LEFT	142.60	DEG.	F
C	27	BATTERY RIGHT	140.96	DEG.	F
C	28	AIR IN SET	125.51	DEG.	F
C	29	FUEL TANK	134.65	DEG.	F
C	30	FUEL OUTLET	148.72	DEG.	F

END SCAN GROUP 1 15 JAN 88 10:45:12

STOPPED SINGLE SCAN 15 JAN 88 10:45:12

BEGIN SCAN GROUP 1 15 JAN 88 09:15:21
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	812.64	DEG.	F
C	2	EXHAUST 2	851.61	DEG.	F
C	3	EXHAUST 3	867.89	DEG.	F
C	4	EXHAUST 4	861.50	DEG.	F
C	5	EXHAUST 5	869.48	DEG.	F
C	6	EXHAUST 6	778.96	DEG.	F
C	7	ENG. COOL. IN	208.06	DEG.	F
C	8	ENG. COOL. OUT	216.83	DEG.	F
C	9	OIL SUMP	177.47	DEG.	F
C	10	OIL GALLERY	248.75	DEG.	F
C	13	ENG. INTAKE	135.75	DEG.	F
C	14	RAD. TOP LEFT	156.05	DEG.	F
C	15	RAD. BTM LEFT	152.23	DEG.	F
C	16	RAD. TOP RIGHT	153.49	DEG.	F
C	17	RAD. BTM RIGHT	155.08	DEG.	F
C	18	GEN. AIR IN	122.77	DEG.	F
C	19	GEN. AIR OUT	169.38	DEG.	F
C	20	GEN. FRAME TOP	133.55	DEG.	F
C	21	GEN. FRAME BTM	148.72	DEG.	F
C	22	GEN. EXCITER	139.35	DEG.	F
C	23	GEN. VOLT. REG.	137.57	DEG.	F
C	24	CONTROL PANEL	138.31	DEG.	F
C	25	RELAY AREA	120.61	DEG.	F
C	26	BATTERY LEFT	140.50	DEG.	F
C	27	BATTERY RIGHT	138.00	DEG.	F
C	28	AIR IN SET	124.28	DEG.	F
C	29	FUEL TANK	125.51	DEG.	F
C	30	FUEL OUTLET	148.55	DEG.	F

END SCAN GROUP 1 15 JAN 88 09:15:30

STOPPED SINGLE SCAN 15 JAN 88 09:15:30

BEGIN SCAN GROUP 1 15 JAN 88 09:45:06
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	813.72	DEG.	F
C	2	EXHAUST 2	857.55	DEG.	F
C	3	EXHAUST 3	871.82	DEG.	F
C	4	EXHAUST 4	862.86	DEG.	F
C	5	EXHAUST 5	870.06	DEG.	F
C	6	EXHAUST 6	775.93	DEG.	F
C	7	ENG. COOL. IN	209.17	DEG.	F
C	8	ENG. COOL. OUT	217.24	DEG.	F
C	9	OIL SUMP		OPEN TO	
C	10	OIL GALLERY	249.25	DEG.	F
C	13	ENG. INTAKE	136.13	DEG.	F
C	14	RAD. TOP LEFT	156.28	DEG.	F
C	15	RAD. BTM LEFT	152.82	DEG.	F
C	16	RAD. TOP RIGHT	153.75	DEG.	F
C	17	RAD. BTM RIGHT	155.29	DEG.	F
C	18	GEN. AIR IN	123.15	DEG.	F
C	19	GEN. AIR OUT	169.70	DEG.	F
C	20	GEN. FRAME TOP	133.01	DEG.	F
C	21	GEN. FRAME BTM	141.30	DEG.	F
C	22	GEN. EXCITER	138.17	DEG.	F
C	23	GEN. VOLT. REG.	137.16	DEG.	F
C	24	CONTROL PANEL	138.99	DEG.	F
C	25	RELAY AREA	121.74	DEG.	F
C	26	BATTERY LEFT	141.02	DEG.	F
C	27	BATTERY RIGHT	138.36	DEG.	F
C	28	AIR IN SET	124.66	DEG.	F
C	29	FUEL TANK	129.26	DEG.	F
C	30	FUEL OUTLET	147.91	DEG.	F

END SCAN GROUP 1 15 JAN 88 09:45:16

STOPPED SINGLE SCAN 15 JAN 88 09:45:16

BEGIN SCAN GROUP 1 15 JAN 88 11:15:06
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	817.07	DEG.	F
C	2	EXHAUST 2	861.18	DEG.	F
C	3	EXHAUST 3	877.34	DEG.	F
C	4	EXHAUST 4	872.28	DEG.	F
C	5	EXHAUST 5	878.22	DEG.	F
C	6	EXHAUST 6	784.57	DEG.	F
C	7	ENG. COOL. IN	208.85	DEG.	F
C	8	ENG. COOL. OUT	217.57	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	249.88	DEG.	F
C	13	ENG. INTAKE	137.78	DEG.	F
C	14	RAD. TOP LEFT	156.24	DEG.	F
C	15	RAD. BTM LEFT	152.95	DEG.	F
C	16	RAD. TOP RIGHT	154.21	DEG.	F
C	17	RAD. BTM RIGHT	156.36	DEG.	F
C	18	GEN. AIR IN	123.40	DEG.	F
C	19	GEN. AIR OUT	169.48	DEG.	F
C	20	GEN. FRAME TOP	135.89	DEG.	F
C	21	GEN. FRAME BTM	141.25	DEG.	F
C	22	GEN. EXCITER	148.39	DEG.	F
C	23	GEN. VOLT. REG.	137.11	DEG.	F
C	24	CONTROL PANEL	137.81	DEG.	F
C	25	RELAY AREA	121.43	DEG.	F
C	26	BATTERY LEFT	143.10	DEG.	F
C	27	BATTERY RIGHT	141.66	DEG.	F
C	28	AIR IN SET	125.34	DEG.	F
C	29	FUEL TANK	135.74	DEG.	F
C	30	FUEL OUTLET	148.62	DEG.	F

END SCAN GROUP 1 15 JAN 88 11:15:15

STOPPED SINGLE SCAN 15 JAN 88 11:15:15

BEGIN SCAN GROUP 1 15 JAN 88 11:25:16
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	377.86	DEG.	F
C	2	EXHAUST 2	437.42	DEG.	F
C	3	EXHAUST 3	426.35	DEG.	F
C	4	EXHAUST 4	422.86	DEG.	F
C	5	EXHAUST 5	437.14	DEG.	F
C	6	EXHAUST 6	377.10	DEG.	F
C	7	ENG. COOL. IN	183.86	DEG.	F
C	8	ENG. COOL. OUT	188.27	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	235.42	DEG.	F
C	13	ENG. INTAKE	131.87	DEG.	F
C	14	RAD. TOP LEFT	144.26	DEG.	F
C	15	RAD. BTM LEFT	142.20	DEG.	F
C	16	RAD. TOP RIGHT	146.70	DEG.	F
C	17	RAD. BTM RIGHT	147.84	DEG.	F
C	18	GEN. AIR IN	122.88	DEG.	F
C	19	GEN. AIR OUT	163.52	DEG.	F
C	20	GEN. FRAME TOP	132.15	DEG.	F
C	21	GEN. FRAME BTM	139.01	DEG.	F
C	22	GEN. EXCITER	138.65	DEG.	F
C	23	GEN. VOLT. REG.	136.58	DEG.	F
C	24	CONTROL PANEL	137.59	DEG.	F
C	25	RELAY AREA	121.16	DEG.	F
C	26	BATTERY LEFT	141.11	DEG.	F
C	27	BATTERY RIGHT	139.97	DEG.	F
C	28	AIR IN SET	124.75	DEG.	F
C	29	FUEL TANK	130.91	DEG.	F
C	30	FUEL OUTLET	158.48	DEG.	F

END SCAN GROUP 1 15 JAN 88 11:25:25

STOPPED SINGLE SCAN 15 JAN 88 11:25:25

BEGIN SCAN GROUP 1 15 JAN 88 11:35:05
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	378.08	DEG.	F
C	2	EXHAUST 2	436.23	DEG.	F
C	3	EXHAUST 3	426.88	DEG.	F
C	4	EXHAUST 4	418.61	DEG.	F
C	5	EXHAUST 5	434.59	DEG.	F
C	6	EXHAUST 6	375.66	DEG.	F
C	7	ENG. COOL. IN	181.54	DEG.	F
C	8	ENG. COOL. OUT	187.88	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	227.64	DEG.	F
C	13	ENG. INTAKE	132.84	DEG.	F
C	14	RAD. TOP LEFT	143.51	DEG.	F
C	15	RAD. BTM LEFT	141.67	DEG.	F
C	16	RAD. TOP RIGHT	146.83	DEG.	F
C	17	RAD. BTM RIGHT	146.84	DEG.	F
C	18	GEN. AIR IN	123.86	DEG.	F
C	19	GEN. AIR OUT	161.14	DEG.	F
C	20	GEN. FRAME TOP	132.34	DEG.	F
C	21	GEN. FRAME BTM	137.83	DEG.	F
C	22	GEN. EXCITER	139.84	DEG.	F
C	23	GEN. VOLT. REG.	135.23	DEG.	F
C	24	CONTROL PANEL	136.94	DEG.	F
C	25	RELAY AREA	128.88	DEG.	F
C	26	BATTERY LEFT	139.16	DEG.	F
C	27	BATTERY RIGHT	138.94	DEG.	F
C	28	AIR IN SET	126.34	DEG.	F
C	29	FUEL TANK	138.86	DEG.	F
C	30	FUEL OUTLET	149.24	DEG.	F

END SCAN GROUP 1 15 JAN 88 11:35:15

STOPPED SINGLE SCAN 15 JAN 88 11:35:15

BEGIN SCAN GROUP 1 15 JAN 88 11:45:11
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	379.65	DEG.	F
C	2	EXHAUST 2	437.88	DEG.	F
C	3	EXHAUST 3	438.89	DEG.	F
C	4	EXHAUST 4	417.87	DEG.	F
C	5	EXHAUST 5	434.42	DEG.	F
C	6	EXHAUST 6	376.78	DEG.	F
C	7	ENG. COOL. IN	188.96	DEG.	F
C	8	ENG. COOL. OUT	186.95	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	225.86	DEG.	F
C	13	ENG. INTAKE	131.32	DEG.	F
C	14	RAD. TOP LEFT	142.18	DEG.	F
C	15	RAD. BTM LEFT	148.21	DEG.	F
C	16	RAD. TOP RIGHT	144.74	DEG.	F
C	17	RAD. BTM RIGHT	145.77	DEG.	F
C	18	GEN. AIR IN	122.67	DEG.	F
C	19	GEN. AIR OUT	159.87	DEG.	F
C	20	GEN. FRAME TOP	131.74	DEG.	F
C	21	GEN. FRAME BTM	137.18	DEG.	F
C	22	GEN. EXCITER	138.67	DEG.	F
C	23	GEN. VOLT. REG.	135.22	DEG.	F
C	24	CONTROL PANEL	137.83	DEG.	F
C	25	RELAY AREA	121.79	DEG.	F
C	26	BATTERY LEFT	139.28	DEG.	F
C	27	BATTERY RIGHT	139.18	DEG.	F
C	28	AIR IN SET	123.48	DEG.	F
C	29	FUEL TANK	138.86	DEG.	F
C	30	FUEL OUTLET	148.74	DEG.	F

END SCAN GROUP 1 15 JAN 88 11:45:20

STOPPED SINGLE SCAN 15 JAN 88 11:45:20

BEGIN SCAN GROUP 1 15 JAN 88 12:30:16
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	384.88	DEG.	F
C	2	EXHAUST 2	434.36	DEG.	F
C	3	EXHAUST 3	429.82	DEG.	F
C	4	EXHAUST 4	425.82	DEG.	F
C	5	EXHAUST 5	448.58	DEG.	F
C	6	EXHAUST 6	385.96	DEG.	F
C	7	ENG. COOL. IN	181.83	DEG.	F
C	8	ENG. COOL. OUT	187.18	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	223.53	DEG.	F
C	13	ENG. INTAKE	131.88	DEG.	F
C	14	RAD. TOP LEFT	142.44	DEG.	F
C	15	RAD. BTM LEFT	148.64	DEG.	F
C	16	RAD. TOP RIGHT	143.93	DEG.	F
C	17	RAD. BTM RIGHT	145.39	DEG.	F
C	18	GEN. AIR IN	124.57	DEG.	F
C	19	GEN. AIR OUT	156.69	DEG.	F
C	20	GEN. FRAME TOP	131.19	DEG.	F
C	21	GEN. FRAME BTM	136.16	DEG.	F
C	22	GEN. EXCITER	138.84	DEG.	F
C	23	GEN. VOLT. REG.	133.96	DEG.	F
C	24	CONTROL PANEL	136.93	DEG.	F
C	25	RELAY AREA	128.72	DEG.	F
C	26	BATTERY LEFT	138.58	DEG.	F
C	27	BATTERY RIGHT	138.84	DEG.	F
C	28	AIR IN SET	125.38	DEG.	F
C	29	FUEL TANK	138.85	DEG.	F
C	30	FUEL OUTLET	147.69	DEG.	F

END SCAN GROUP 1 15 JAN 88 12:30:25

STOPPED SINGLE SCAN 15 JAN 88 12:30:25

BEGIN SCAN GROUP 1 15 JAN 88 13:00:15
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	378.34	DEG.	F
C	2	EXHAUST 2	441.99	DEG.	F
C	3	EXHAUST 3	436.28	DEG.	F
C	4	EXHAUST 4	429.69	DEG.	F
C	5	EXHAUST 5	435.94	DEG.	F
C	6	EXHAUST 6	388.49	DEG.	F
C	7	ENG. COOL. IN	181.44	DEG.	F
C	8	ENG. COOL. OUT	187.77	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	224.11	DEG.	F
C	13	ENG. INTAKE	131.45	DEG.	F
C	14	RAD. TOP LEFT	142.21	DEG.	F
C	15	RAD. BTM LEFT	148.41	DEG.	F
C	16	RAD. TOP RIGHT	144.58	DEG.	F
C	17	RAD. BTM RIGHT	145.51	DEG.	F
C	18	GEN. AIR IN	123.58	DEG.	F
C	19	GEN. AIR OUT	156.31	DEG.	F
C	20	GEN. FRAME TOP	131.23	DEG.	F
C	21	GEN. FRAME BTM	136.87	DEG.	F
C	22	GEN. EXCITER	138.31	DEG.	F
C	23	GEN. VOLT. REG.	134.36	DEG.	F
C	24	CONTROL PANEL	136.96	DEG.	F
C	25	RELAY AREA	121.45	DEG.	F
C	26	BATTERY LEFT	138.68	DEG.	F
C	27	BATTERY RIGHT	139.57	DEG.	F
C	28	AIR IN SET	124.44	DEG.	F
C	29	FUEL TANK	138.48	DEG.	F
C	30	FUEL OUTLET	147.65	DEG.	F

END SCAN GROUP 1 15 JAN 88 13:00:25

STOPPED SINGLE SCAN 15 JAN 88 13:00:25

BEGIN SCAN GROUP 1 15 JAN 88 11:55:07
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	380.24	DEG.	F
C	2	EXHAUST 2	437.27	DEG.	F
C	3	EXHAUST 3	427.95	DEG.	F
C	4	EXHAUST 4	417.47	DEG.	F
C	5	EXHAUST 5	437.24	DEG.	F
C	6	EXHAUST 6	379.80	DEG.	F
C	7	ENG. COOL. IN	188.51	DEG.	F
C	8	ENG. COOL. OUT	186.78	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	223.87	DEG.	F
C	13	ENG. INTAKE	138.78	DEG.	F
C	14	RAD. TOP LEFT	142.68	DEG.	F
C	15	RAD. BTM LEFT	148.77	DEG.	F
C	16	RAD. TOP RIGHT	145.82	DEG.	F
C	17	RAD. BTM RIGHT	146.84	DEG.	F
C	18	GEN. AIR IN	124.89	DEG.	F
C	19	GEN. AIR OUT	158.87	DEG.	F
C	20	GEN. FRAME TOP	131.59	DEG.	F
C	21	GEN. FRAME BTM	136.21	DEG.	F
C	22	GEN. EXCITER	138.19	DEG.	F
C	23	GEN. VOLT. REG.	134.47	DEG.	F
C	24	CONTROL PANEL	136.69	DEG.	F
C	25	RELAY AREA	121.57	DEG.	F
C	26	BATTERY LEFT	138.79	DEG.	F
C	27	BATTERY RIGHT	139.28	DEG.	F
C	28	AIR IN SET	125.84	DEG.	F
C	29	FUEL TANK	138.91	DEG.	F
C	30	FUEL OUTLET	147.28	DEG.	F

END SCAN GROUP 1 15 JAN 88 11:55:17

STOPPED SINGLE SCAN 15 JAN 88 11:55:17

BEGIN SCAN GROUP 1 15 JAN 88 11:56:47
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	381.69	DEG.	F
C	2	EXHAUST 2	437.61	DEG.	F
C	3	EXHAUST 3	429.65	DEG.	F
C	4	EXHAUST 4	419.48	DEG.	F
C	5	EXHAUST 5	436.24	DEG.	F
C	6	EXHAUST 6	379.11	DEG.	F
C	7	ENG. COOL. IN	181.87	DEG.	F
C	8	ENG. COOL. OUT	186.96	DEG.	F
C	9	OIL SUMP		OPEN TC	
C	10	OIL GALLERY	223.75	DEG.	F
C	13	ENG. INTAKE	131.55	DEG.	F
C	14	RAD. TOP LEFT	142.79	DEG.	F
C	15	RAD. BTM LEFT	148.95	DEG.	F
C	16	RAD. TOP RIGHT	145.12	DEG.	F
C	17	RAD. BTM RIGHT	146.22	DEG.	F
C	18	GEN. AIR IN	124.82	DEG.	F
C	19	GEN. AIR OUT	158.18	DEG.	F
C	20	GEN. FRAME TOP	131.98	DEG.	F
C	21	GEN. FRAME BTM	136.84	DEG.	F
C	22	GEN. EXCITER	138.45	DEG.	F
C	23	GEN. VOLT. REG.	134.42	DEG.	F
C	24	CONTROL PANEL	137.18	DEG.	F
C	25	RELAY AREA	122.38	DEG.	F
C	26	BATTERY LEFT	139.22	DEG.	F
C	27	BATTERY RIGHT	139.15	DEG.	F
C	28	AIR IN SET	126.84	DEG.	F
C	29	FUEL TANK	138.98	DEG.	F
C	30	FUEL OUTLET	147.89	DEG.	F

END SCAN GROUP 1 15 JAN 88 11:56:56

STOPPED SINGLE SCAN 15 JAN 88 11:56:57

BEGIN SCAN GROUP 1 15 JAN 88 14:30:11
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	374.81	DEG.	F
C	2	EXHAUST 2	442.33	DEG.	F
C	3	EXHAUST 3	437.66	DEG.	F
C	4	EXHAUST 4	437.86	DEG.	F
C	5	EXHAUST 5	440.80	DEG.	F
C	6	EXHAUST 6	377.57	DEG.	F
C	7	ENG. COOL. IN	181.57	DEG.	F
C	8	ENG. COOL. OUT	187.94	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	224.49	DEG.	F
C	13	ENG. INTAKE	131.35	DEG.	F
C	14	RAD. TOP LEFT	142.26	DEG.	F
C	15	RAD. BTM LEFT	140.15	DEG.	F
C	16	RAD. TOP RIGHT	144.11	DEG.	F
C	17	RAD. BTM RIGHT	145.38	DEG.	F
C	18	GEN. AIR IN	123.11	DEG.	F
C	19	GEN. AIR OUT	156.15	DEG.	F
C	20	GEN. FRAME TOP	131.08	DEG.	F
C	21	GEN. FRAME BTM	136.82	DEG.	F
C	22	GEN. EXCITER	138.05	DEG.	F
C	23	GEN. VOLT. REG.	134.43	DEG.	F
C	24	CONTROL PANEL	137.08	DEG.	F
C	25	RELAY AREA	122.11	DEG.	F
C	26	BATTERY LEFT	138.96	DEG.	F
C	27	BATTERY RIGHT	139.59	DEG.	F
C	28	AIR IN SET	124.53	DEG.	F
C	29	FUEL TANK	138.84	DEG.	F
C	30	FUEL OUTLET	147.57	DEG.	F

END SCAN GROUP 1 15 JAN 88 14:30:21

STOPPED SINGLE SCAN 15 JAN 88 14:30:21

BEGIN SCAN GROUP 1 15 JAN 88 15:00:21
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	374.91	DEG.	F
C	2	EXHAUST 2	441.91	DEG.	F
C	3	EXHAUST 3	440.15	DEG.	F
C	4	EXHAUST 4	440.69	DEG.	F
C	5	EXHAUST 5	440.20	DEG.	F
C	6	EXHAUST 6	376.39	DEG.	F
C	7	ENG. COOL. IN	180.92	DEG.	F
C	8	ENG. COOL. OUT	107.32	DEG.	F
C	9	OIL SUMP	137.61	DEG.	F
C	10	OIL GALLERY	223.71	DEG.	F
C	13	ENG. INTAKE	131.03	DEG.	F
C	14	RAD. TOP LEFT	142.16	DEG.	F
C	15	RAD. BTM LEFT	140.16	DEG.	F
C	16	RAD. TOP RIGHT	143.98	DEG.	F
C	17	RAD. BTM RIGHT	145.06	DEG.	F
C	18	GEN. AIR IN	123.72	DEG.	F
C	19	GEN. AIR OUT	155.39	DEG.	F
C	20	GEN. FRAME TOP	130.17	DEG.	F
C	21	GEN. FRAME BTM	135.02	DEG.	F
C	22	GEN. EXCITER	137.58	DEG.	F
C	23	GEN. VOLT. REG.	133.56	DEG.	F
C	24	CONTROL PANEL	136.27	DEG.	F
C	25	RELAY AREA	120.08	DEG.	F
C	26	BATTERY LEFT	138.49	DEG.	F
C	27	BATTERY RIGHT	139.31	DEG.	F
C	28	AIR IN SET	124.86	DEG.	F
C	29	FUEL TANK	130.00	DEG.	F
C	30	FUEL OUTLET	146.79	DEG.	F

END SCAN GROUP 1 15 JAN 88 15:00:31

STOPPED SINGLE SCAN 15 JAN 88 15:00:31

BEGIN SCAN GROUP 1 15 JAN 88 13:30:42
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	374.46	DEG.	F
C	2	EXHAUST 2	442.38	DEG.	F
C	3	EXHAUST 3	440.61	DEG.	F
C	4	EXHAUST 4	436.43	DEG.	F
C	5	EXHAUST 5	434.25	DEG.	F
C	6	EXHAUST 6	373.62	DEG.	F
C	7	ENG. COOL. IN	181.01	DEG.	F
C	8	ENG. COOL. OUT	187.09	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	223.60	DEG.	F
C	13	ENG. INTAKE	131.15	DEG.	F
C	14	RAD. TOP LEFT	141.82	DEG.	F
C	15	RAD. BTM LEFT	139.95	DEG.	F
C	16	RAD. TOP RIGHT	143.86	DEG.	F
C	17	RAD. BTM RIGHT	144.84	DEG.	F
C	18	GEN. AIR IN	122.77	DEG.	F
C	19	GEN. AIR OUT	155.39	DEG.	F
C	20	GEN. FRAME TOP	130.41	DEG.	F
C	21	GEN. FRAME BTM	135.45	DEG.	F
C	22	GEN. EXCITER	137.62	DEG.	F
C	23	GEN. VOLT. REG.	133.44	DEG.	F
C	24	CONTROL PANEL	136.75	DEG.	F
C	25	RELAY AREA	121.23	DEG.	F
C	26	BATTERY LEFT	138.51	DEG.	F
C	27	BATTERY RIGHT	138.99	DEG.	F
C	28	AIR IN SET	124.12	DEG.	F
C	29	FUEL TANK	130.16	DEG.	F
C	30	FUEL OUTLET	147.01	DEG.	F

END SCAN GROUP 1 15 JAN 88 13:30:57

STOPPED SINGLE SCAN 15 JAN 88 13:30:57

BEGIN SCAN GROUP 1 15 JAN 88 14:00:08
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	373.23	DEG.	F
C	2	EXHAUST 2	443.27	DEG.	F
C	3	EXHAUST 3	440.18	DEG.	F
C	4	EXHAUST 4	440.98	DEG.	F
C	5	EXHAUST 5	438.39	DEG.	F
C	6	EXHAUST 6	378.18	DEG.	F
C	7	ENG. COOL. IN	182.83	DEG.	F
C	8	ENG. COOL. OUT	180.01	DEG.	F
C	9	OIL SUMP		OPEN	TC
C	10	OIL GALLERY	224.07	DEG.	F
C	13	ENG. INTAKE	132.37	DEG.	F
C	14	RAD. TOP LEFT	143.08	DEG.	F
C	15	RAD. BTM LEFT	141.16	DEG.	F
C	16	RAD. TOP RIGHT	145.04	DEG.	F
C	17	RAD. BTM RIGHT	145.95	DEG.	F
C	18	GEN. AIR IN	124.90	DEG.	F
C	19	GEN. AIR OUT	156.60	DEG.	F
C	20	GEN. FRAME TOP	131.68	DEG.	F
C	21	GEN. FRAME BTM	136.64	DEG.	F
C	22	GEN. EXCITER	139.12	DEG.	F
C	23	GEN. VOLT. REG.	133.96	DEG.	F
C	24	CONTROL PANEL	136.86	DEG.	F
C	25	RELAY AREA	121.85	DEG.	F
C	26	BATTERY LEFT	138.86	DEG.	F
C	27	BATTERY RIGHT	139.75	DEG.	F
C	28	AIR IN SET	125.89	DEG.	F
C	29	FUEL TANK	129.89	DEG.	F
C	30	FUEL OUTLET	147.63	DEG.	F

END SCAN GROUP 1 15 JAN 88 14:00:16

STOPPED SINGLE SCAN 15 JAN 88 14:00:16

CALCUT INTERLUPT TEST (SHORT CIRCUIT) METHOD 512.1

BEGIN SCAN GROUP 1 16 JAN 88 09:44:20
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	804.31	DEG.	F
C	2	EXHAUST 2	858.98	DEG.	F
C	3	EXHAUST 3	867.96	DEG.	F
C	4	EXHAUST 4	867.59	DEG.	F
C	5	EXHAUST 5	881.75	DEG.	F
C	6	EXHAUST 6	805.18	DEG.	F
C	7	ENG. COOL. IN	204.36	DEG.	F
C	8	ENG. COOL. OUT	212.00	DEG.	F
C	9	OIL SUMP	231.01	DEG.	F
C	10	OIL GALLERY	232.20	DEG.	F
C	13	ENG. INTAKE	135.47	DEG.	F
C	14	RAD. TOP LEFT	152.10	DEG.	F
C	15	RAD. BTM LEFT	151.55	DEG.	F
C	16	RAD. TOP RIGHT	147.93	DEG.	F
C	17	RAD. BTM RIGHT	149.70	DEG.	F
C	18	GEN. AIR IN	123.75	DEG.	F
C	19	GEN. AIR OUT	150.94	DEG.	F
C	20	GEN. FRAME TOP	132.20	DEG.	F
C	21	GEN. FRAME BTM	132.21	DEG.	F
C	22	GEN. EXCITER	136.35	DEG.	F
C	23	GEN. VOLT. REG.	138.35	DEG.	F
C	24	CONTROL PANEL	132.02	DEG.	F
C	25	RELAY AREA	118.74	DEG.	F
C	26	BATTERY LEFT	126.50	DEG.	F
C	27	BATTERY RIGHT	121.75	DEG.	F
C	28	AIR IN SET	125.52	DEG.	F
C	29	FUEL TANK	84.928	DEG.	F
C	30	FUEL OUTLET	137.16	DEG.	F

END SCAN GROUP 1 16 JAN 88 09:44:30

STOPPED SINGLE SCAN 16 JAN 88 09:44:30

BEGIN SCAN GROUP 1 16 JAN 88 09:51:32
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	798.82	DEG.	F
C	2	EXHAUST 2	842.22	DEG.	F
C	3	EXHAUST 3	871.30	DEG.	F
C	4	EXHAUST 4	861.46	DEG.	F
C	5	EXHAUST 5	869.40	DEG.	F
C	6	EXHAUST 6	803.72	DEG.	F
C	7	ENG. COOL. IN	201.29	DEG.	F
C	8	ENG. COOL. OUT	209.42	DEG.	F
C	9	OIL SUMP	233.87	DEG.	F
C	10	OIL GALLERY	234.05	DEG.	F
C	13	ENG. INTAKE	137.31	DEG.	F
C	14	RAD. TOP LEFT	152.32	DEG.	F
C	15	RAD. BTM LEFT	150.39	DEG.	F
C	16	RAD. TOP RIGHT	148.73	DEG.	F
C	17	RAD. BTM RIGHT	151.03	DEG.	F
C	18	GEN. AIR IN	122.39	DEG.	F
C	19	GEN. AIR OUT	155.66	DEG.	F
C	20	GEN. FRAME TOP	128.93	DEG.	F
C	21	GEN. FRAME BTM	135.72	DEG.	F
C	22	GEN. EXCITER	138.98	DEG.	F
C	23	GEN. VOLT. REG.	129.35	DEG.	F
C	24	CONTROL PANEL	134.19	DEG.	F
C	25	RELAY AREA	119.74	DEG.	F
C	26	BATTERY LEFT	129.30	DEG.	F
C	27	BATTERY RIGHT	125.05	DEG.	F
C	28	AIR IN SET	124.64	DEG.	F
C	29	FUEL TANK	88.616	DEG.	F
C	30	FUEL OUTLET	140.42	DEG.	F

END SCAN GROUP 1 16 JAN 88 09:51:41

STOPPED SINGLE SCAN 16 JAN 88 09:51:41

BEGIN SCAN GROUP 1 16 JAN 88 09:56:24
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	756.07	DEG.	F
C	2	EXHAUST 2	805.12	DEG.	F
C	3	EXHAUST 3	826.63	DEG.	F
C	4	EXHAUST 4	812.87	DEG.	F
C	5	EXHAUST 5	826.45	DEG.	F
C	6	EXHAUST 6	767.27	DEG.	F
C	7	ENG. COOL. IN	191.35	DEG.	F
C	8	ENG. COOL. OUT	199.16	DEG.	F
C	9	OIL SUMP	234.20	DEG.	F
C	10	OIL GALLERY	233.94	DEG.	F
C	13	ENG. INTAKE	136.09	DEG.	F
C	14	RAD. TOP LEFT	149.55	DEG.	F
C	15	RAD. BTM LEFT	147.50	DEG.	F
C	16	RAD. TOP RIGHT	147.31	DEG.	F
C	17	RAD. BTM RIGHT	149.49	DEG.	F
C	18	GEN. AIR IN	122.97	DEG.	F
C	19	GEN. AIR OUT	156.58	DEG.	F
C	20	GEN. FRAME TOP	130.69	DEG.	F
C	21	GEN. FRAME BTM	137.64	DEG.	F
C	22	GEN. EXCITER	138.41	DEG.	F
C	23	GEN. VOLT. REG.	131.49	DEG.	F
C	24	CONTROL PANEL	135.49	DEG.	F
C	25	RELAY AREA	120.34	DEG.	F
C	26	BATTERY LEFT	131.76	DEG.	F
C	27	BATTERY RIGHT	127.26	DEG.	F
C	28	AIR IN SET	124.97	DEG.	F
C	29	FUEL TANK	89.235	DEG.	F
C	30	FUEL OUTLET	143.60	DEG.	F

END SCAN GROUP 1 16 JAN 88 09:56:34

STOPPED SINGLE SCAN 16 JAN 88 09:56:34

BEGIN SCAN GROUP 1 16 JAN 88 10:00:48
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	776.24	DEG.	F
C	2	EXHAUST 2	830.01	DEG.	F
C	3	EXHAUST 3	839.63	DEG.	F
C	4	EXHAUST 4	832.29	DEG.	F
C	5	EXHAUST 5	844.18	DEG.	F
C	6	EXHAUST 6	782.94	DEG.	F
C	7	ENG. COOL. IN	193.87	DEG.	F
C	8	ENG. COOL. OUT	201.63	DEG.	F
C	9	OIL SUMP	234.98	DEG.	F
C	10	OIL GALLERY	236.05	DEG.	F
C	13	ENG. INTAKE	136.87	DEG.	F
C	14	RAD. TOP LEFT	148.48	DEG.	F
C	15	RAD. BTM LEFT	147.80	DEG.	F
C	16	RAD. TOP RIGHT	147.10	DEG.	F
C	17	RAD. BTM RIGHT	149.01	DEG.	F
C	18	GEN. AIR IN	123.21	DEG.	F
C	19	GEN. AIR OUT	156.96	DEG.	F
C	20	GEN. FRAME TOP	134.46	DEG.	F
C	21	GEN. FRAME BTM	136.66	DEG.	F
C	22	GEN. EXCITER	138.01	DEG.	F
C	23	GEN. VOLT. REG.	133.81	DEG.	F
C	24	CONTROL PANEL	135.84	DEG.	F
C	25	RELAY AREA	119.91	DEG.	F
C	26	BATTERY LEFT	132.21	DEG.	F
C	27	BATTERY RIGHT	127.76	DEG.	F
C	28	AIR IN SET	124.74	DEG.	F
C	29	FUEL TANK	90.499	DEG.	F
C	30	FUEL OUTLET	144.74	DEG.	F

END SCAN GROUP 1 16 JAN 88 10:00:58

STOPPED SINGLE SCAN 16 JAN 88 10:00:58

BEGIN SCAN GROUP 1 16 JAN 88 10:08:04
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	649.62	DEG.	F
C	2	EXHAUST 2	713.66	DEG.	F
C	3	EXHAUST 3	726.19	DEG.	F
C	4	EXHAUST 4	717.58	DEG.	F
C	5	EXHAUST 5	721.76	DEG.	F
C	6	EXHAUST 6	658.42	DEG.	F
C	7	ENG. COOL. IN	182.08	DEG.	F
C	8	ENG. COOL. OUT	189.16	DEG.	F
C	9	OIL SUMP	229.42	DEG.	F
C	10	OIL GALLERY	228.08	DEG.	F
C	13	ENG. INTAKE	132.25	DEG.	F
C	14	RAD. TOP LEFT	144.99	DEG.	F
C	15	RAD. BTM LEFT	142.84	DEG.	F
C	16	RAD. TOP RIGHT	145.75	DEG.	F
C	17	RAD. BTM RIGHT	147.33	DEG.	F
C	18	GEN. AIR IN	122.72	DEG.	F
C	19	GEN. AIR OUT	157.26	DEG.	F
C	20	GEN. FRAME TOP	131.13	DEG.	F
C	21	GEN. FRAME BTM	137.52	DEG.	F
C	22	GEN. EXCITER	137.54	DEG.	F
C	23	GEN. VOLT. REG.	133.17	DEG.	F
C	24	CONTROL PANEL	136.33	DEG.	F
C	25	RELAY AREA	119.84	DEG.	F
C	26	BATTERY LEFT	132.39	DEG.	F
C	27	BATTERY RIGHT	128.53	DEG.	F
C	28	AIR IN SET	123.65	DEG.	F
C	29	FUEL TANK	93.016	DEG.	F
C	30	FUEL OUTLET	146.62	DEG.	F

END SCAN GROUP 1 16 JAN 88 10:08:13

STOPPED SINGLE SCAN 16 JAN 88 10:08:14

BEGIN SCAN GROUP 1 16 JAN 88 10:11:50
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	672.27	DEG.	F
C	2	EXHAUST 2	744.34	DEG.	F
C	3	EXHAUST 3	754.15	DEG.	F
C	4	EXHAUST 4	741.79	DEG.	F
C	5	EXHAUST 5	755.84	DEG.	F
C	6	EXHAUST 6	679.39	DEG.	F
C	7	ENG. COOL. IN	189.09	DEG.	F
C	8	ENG. COOL. OUT	193.77	DEG.	F
C	9	OIL SUMP	231.43	DEG.	F
C	10	OIL GALLERY	233.92	DEG.	F
C	13	ENG. INTAKE	131.93	DEG.	F
C	14	RAD. TOP LEFT	146.08	DEG.	F
C	15	RAD. BTM LEFT	144.88	DEG.	F
C	16	RAD. TOP RIGHT	146.07	DEG.	F
C	17	RAD. BTM RIGHT	147.65	DEG.	F
C	18	GEN. AIR IN	123.39	DEG.	F
C	19	GEN. AIR OUT	156.53	DEG.	F
C	20	GEN. FRAME TOP	129.85	DEG.	F
C	21	GEN. FRAME BTM	135.44	DEG.	F
C	22	GEN. EXCITER	138.77	DEG.	F
C	23	GEN. VOLT. REG.	131.72	DEG.	F
C	24	CONTROL PANEL	135.48	DEG.	F
C	25	RELAY AREA	118.87	DEG.	F
C	26	BATTERY LEFT	131.33	DEG.	F
C	27	BATTERY RIGHT	127.98	DEG.	F
C	28	AIR IN SET	123.78	DEG.	F
C	29	FUEL TANK	96.046	DEG.	F
C	30	FUEL OUTLET	145.83	DEG.	F

END SCAN GROUP 1 16 JAN 88 10:12:00

STOPPED SINGLE SCAN 16 JAN 88 10:12:00

BEGIN SCAN GROUP 1 16 JAN 88 10:19:08
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	617.63	DEG.	F
C	2	EXHAUST 2	690.40	DEG.	F
C	3	EXHAUST 3	685.77	DEG.	F
C	4	EXHAUST 4	685.65	DEG.	F
C	5	EXHAUST 5	693.84	DEG.	F
C	6	EXHAUST 6	621.32	DEG.	F
C	7	ENG. COOL. IN	181.60	DEG.	F
C	8	ENG. COOL. OUT	188.69	DEG.	F
C	9	OIL SUMP	238.27	DEG.	F
C	10	OIL GALLERY	226.96	DEG.	F
C	13	ENG. INTAKE	134.20	DEG.	F
C	14	RAD. TOP LEFT	145.15	DEG.	F
C	15	RAD. BTM LEFT	143.79	DEG.	F
C	16	RAD. TOP RIGHT	145.84	DEG.	F
C	17	RAD. BTM RIGHT	147.23	DEG.	F
C	18	GEN. AIR IN	123.54	DEG.	F
C	19	GEN. AIR OUT	159.38	DEG.	F
C	20	GEN. FRAME TOP	134.64	DEG.	F
C	21	GEN. FRAME BTM	137.01	DEG.	F
C	22	GEN. EXCITER	138.14	DEG.	F
C	23	GEN. VOLT. REG.	133.74	DEG.	F
C	24	CONTROL PANEL	136.52	DEG.	F
C	25	RELAY AREA	118.35	DEG.	F
C	26	BATTERY LEFT	131.98	DEG.	F
C	27	BATTERY RIGHT	129.79	DEG.	F
C	28	AIR IN SET	126.21	DEG.	F
C	29	FUEL TANK	95.944	DEG.	F
C	30	FUEL OUTLET	147.14	DEG.	F

END SCAN GROUP 1 16 JAN 88 10:19:17

STOPPED SINGLE SCAN 16 JAN 88 10:19:17

BEGIN SCAN GROUP 1 16 JAN 88 10:24:22
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	613.67	DEG.	F
C	2	EXHAUST 2	686.99	DEG.	F
C	3	EXHAUST 3	698.56	DEG.	F
C	4	EXHAUST 4	687.01	DEG.	F
C	5	EXHAUST 5	691.88	DEG.	F
C	6	EXHAUST 6	622.47	DEG.	F
C	7	ENG. COOL. IN	181.74	DEG.	F
C	8	ENG. COOL. OUT	188.87	DEG.	F
C	9	OIL SUMP	228.35	DEG.	F
C	10	OIL GALLERY	225.66	DEG.	F
C	13	ENG. INTAKE	133.28	DEG.	F
C	14	RAD. TOP LEFT	145.27	DEG.	F
C	15	RAD. BTM LEFT	143.62	DEG.	F
C	16	RAD. TOP RIGHT	146.41	DEG.	F
C	17	RAD. BTM RIGHT	147.42	DEG.	F
C	18	GEN. AIR IN	123.71	DEG.	F
C	19	GEN. AIR OUT	159.47	DEG.	F
C	20	GEN. FRAME TOP	132.98	DEG.	F
C	21	GEN. FRAME BTM	138.12	DEG.	F
C	22	GEN. EXCITER	138.17	DEG.	F
C	23	GEN. VOLT. REG.	133.61	DEG.	F
C	24	CONTROL PANEL	136.68	DEG.	F
C	25	RELAY AREA	118.55	DEG.	F
C	26	BATTERY LEFT	132.76	DEG.	F
C	27	BATTERY RIGHT	138.11	DEG.	F
C	28	AIR IN SET	125.63	DEG.	F
C	29	FUEL TANK	97.331	DEG.	F
C	30	FUEL OUTLET	147.69	DEG.	F

END SCAN GROUP 1 16 JAN 88 10:24:31

STOPPED SINGLE SCAN 16 JAN 88 10:24:31

10

SERIAL NO. 12740323

MEZU (2011)

RECORDER/OBSERVER KM/GC

157	NOT COMPLETED DUE TO OVERTEMPERATURE
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Prerequisites:

B-329

Circuit Interrupted (circuit loss) method 512.2
 BEGIN SCAN GROUP 1 16 JAN 88 13:15:36
 30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	817.89	DEG.	F
C	2	EXHAUST 2	867.40	DEG.	F
C	3	EXHAUST 3	887.30	DEG.	F
C	4	EXHAUST 4	883.85	DEG.	F
C	5	EXHAUST 5	892.62	DEG.	F
C	6	EXHAUST 6	819.32	DEG.	F
C	7	ENG. COOL. IN	264.27	DEG.	F
C	8	ENG. COOL. OUT	213.87	DEG.	F
C	9	OIL SUMP	226.20	DEG.	F
C	10	OIL GALLERY	227.55	DEG.	F
C	13	ENG. INTAKE	137.58	DEG.	F
C	14	RAD. TOP LEFT	153.10	DEG.	F
C	15	RAD. BTM LEFT	152.12	DEG.	F
C	16	RAD. TOP RIGHT	146.63	DEG.	F
C	17	RAD. BTM RIGHT	151.56	DEG.	F
C	18	GEN. AIR IN	122.92	DEG.	F
C	19	GEN. AIR OUT	160.36	DEG.	F
C	20	GEN. FRAME TOP	132.37	DEG.	F
C	21	GEN. FRAME BTM	138.38	DEG.	F
C	22	GEN. EXCITER	138.21	DEG.	F
C	23	GEN. VOLT. REG.	133.39	DEG.	F
C	24	CONTROL PANEL	134.59	DEG.	F
C	25	RELAY AREA	120.84	DEG.	F
C	26	BATTERY LEFT	132.32	DEG.	F
C	27	BATTERY RIGHT	129.45	DEG.	F
C	28	AIR IN SET	125.85	DEG.	F
C	29	FUEL TANK	112.35	DEG.	F
C	30	FUEL OUTLET	141.56	DEG.	F

END SCAN GROUP 1 16 JAN 88 13:15:45

STOPPED SINGLE SCAN 16 JAN 88 13:15:45

Circuit Interrupted (circuit loss) method 512.2
 BEGIN SCAN GROUP 1 16 JAN 88 14:30:15
 30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	805.73	DEG.	F
C	2	EXHAUST 2	852.35	DEG.	F
C	3	EXHAUST 3	876.10	DEG.	F
C	4	EXHAUST 4	872.14	DEG.	F
C	5	EXHAUST 5	888.19	DEG.	F
C	6	EXHAUST 6	814.67	DEG.	F
C	7	ENG. COOL. IN	197.36	DEG.	F
C	8	ENG. COOL. OUT	264.44	DEG.	F
C	9	OIL SUMP	213.96	DEG.	F
C	10	OIL GALLERY	749.78	DEG.	F
C	13	ENG. INTAKE	131.40	DEG.	F
C	14	RAD. TOP LEFT	148.12	DEG.	F
C	15	RAD. BTM LEFT	146.45	DEG.	F
C	16	RAD. TOP RIGHT	144.98	DEG.	F
C	17	RAD. BTM RIGHT	145.78	DEG.	F
C	18	GEN. AIR IN	123.70	DEG.	F
C	19	GEN. AIR OUT	156.43	DEG.	F
C	20	GEN. FRAME TOP	131.20	DEG.	F
C	21	GEN. FRAME BTM	131.98	DEG.	F
C	22	GEN. EXCITER	131.51	DEG.	F
C	23	GEN. VOLT. REG.	122.08	DEG.	F
C	24	CONTROL PANEL	121.24	DEG.	F
C	25	RELAY AREA	105.52	DEG.	F
C	26	BATTERY LEFT	115.89	DEG.	F
C	27	BATTERY RIGHT	115.81	DEG.	F
C	28	AIR IN SET	124.82	DEG.	F
C	29	FUEL TANK	111.66	DEG.	F
C	30	FUEL OUTLET	133.24	DEG.	F

END SCAN GROUP 1 16 JAN 88 14:30:25

STOPPED SINGLE SCAN 16 JAN 88 14:30:25

BEGIN SCAN GROUP 1 16 JAN 88 14:40:12
 30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	821.65	DEG.	F
C	2	EXHAUST 2	866.88	DEG.	F
C	3	EXHAUST 3	875.91	DEG.	F
C	4	EXHAUST 4	882.52	DEG.	F
C	5	EXHAUST 5	893.51	DEG.	F
C	6	EXHAUST 6	815.76	DEG.	F
C	7	ENG. COOL. IN	207.42	DEG.	F
C	8	ENG. COOL. OUT	215.77	DEG.	F
C	9	OIL SUMP	239.22	DEG.	F
C	10	OIL GALLERY			OPEN TC
C	13	ENG. INTAKE	138.05	DEG.	F
C	14	RAD. TOP LEFT	153.78	DEG.	F
C	15	RAD. BTM LEFT	152.74	DEG.	F
C	16	RAD. TOP RIGHT	151.22	DEG.	F
C	17	RAD. BTM RIGHT	153.02	DEG.	F
C	18	GEN. AIR IN	123.48	DEG.	F
C	19	GEN. AIR OUT	163.41	DEG.	F
C	20	GEN. FRAME TOP	134.60	DEG.	F
C	21	GEN. FRAME BTM	138.53	DEG.	F
C	22	GEN. EXCITER	137.62	DEG.	F
C	23	GEN. VOLT. REG.	129.55	DEG.	F
C	24	CONTROL PANEL	129.46	DEG.	F
C	25	RELAY AREA	117.86	DEG.	F
C	26	BATTERY LEFT	130.96	DEG.	F
C	27	BATTERY RIGHT	128.90	DEG.	F
C	28	AIR IN SET	125.68	DEG.	F
C	29	FUEL TANK	112.18	DEG.	F
C	30	FUEL OUTLET	141.04	DEG.	F

END SCAN GROUP 1 16 JAN 88 14:40:21

STOPPED SINGLE SCAN 16 JAN 88 14:40:21

BEGIN SCAN GROUP 1 16 JAN 88 15:03:36
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	848.37	DEG.	F
C	2	EXHAUST 2	895.36	DEG.	F
C	3	EXHAUST 3	915.92	DEG.	F
C	4	EXHAUST 4	917.25	DEG.	F
C	5	EXHAUST 5	925.91	DEG.	F
C	6	EXHAUST 6	874.33	DEG.	F
C	7	ENG. COOL. IN	214.39	DEG.	F
C	8	ENG. COOL. OUT	221.86	DEG.	F
C	9	OIL SUMP	249.17	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	138.36	DEG.	F
C	14	RAD. TOP LEFT	156.63	DEG.	F
C	15	RAD. BTM LEFT	154.38	DEG.	F
C	16	RAD. TOP RIGHT	154.54	DEG.	F
C	17	RAD. BTM RIGHT	156.78	DEG.	F
C	18	GEN. AIR IN	124.27	DEG.	F
C	19	GEN. AIR OUT	168.19	DEG.	F
C	20	GEN. FRAME TOP	131.95	DEG.	F
C	21	GEN. FRAME BTM	141.99	DEG.	F
C	22	GEN. EXCITER	148.33	DEG.	F
C	23	GEN. VOLT. REG.	134.78	DEG.	F
C	24	CONTROL PANEL	135.94	DEG.	F
C	25	RELAY AREA	119.86	DEG.	F
C	26	BATTERY LEFT	148.26	DEG.	F
C	27	BATTERY RIGHT	135.28	DEG.	F
C	28	AIR IN SET	125.33	DEG.	F
C	29	FUEL TANK	117.11	DEG.	F
C	30	FUEL OUTLET	147.18	DEG.	F

END SCAN GROUP 1 16 JAN 88 15:03:46

STOPPED SINGLE SCAN 16 JAN 88 15:03:46

BEGIN SCAN GROUP 1 16 JAN 88 15:05:40
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	655.43	DEG.	F
C	2	EXHAUST 2	698.79	DEG.	F
C	3	EXHAUST 3	784.53	DEG.	F
C	4	EXHAUST 4	718.24	DEG.	F
C	5	EXHAUST 5	725.74	DEG.	F
C	6	EXHAUST 6	683.81	DEG.	F
C	7	ENG. COOL. IN	213.39	DEG.	F
C	8	ENG. COOL. OUT	221.38	DEG.	F
C	9	OIL SUMP	249.96	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	138.89	DEG.	F
C	14	RAD. TOP LEFT	156.97	DEG.	F
C	15	RAD. BTM LEFT	154.77	DEG.	F
C	16	RAD. TOP RIGHT	156.88	DEG.	F
C	17	RAD. BTM RIGHT	157.38	DEG.	F
C	18	GEN. AIR IN	123.76	DEG.	F
C	19	GEN. AIR OUT	178.56	DEG.	F
C	20	GEN. FRAME TOP	134.94	DEG.	F
C	21	GEN. FRAME BTM	141.83	DEG.	F
C	22	GEN. EXCITER	148.32	DEG.	F
C	23	GEN. VOLT. REG.	135.81	DEG.	F
C	24	CONTROL PANEL	136.83	DEG.	F
C	25	RELAY AREA	119.37	DEG.	F
C	26	BATTERY LEFT	148.83	DEG.	F
C	27	BATTERY RIGHT	136.22	DEG.	F
C	28	AIR IN SET	125.44	DEG.	F
C	29	FUEL TANK	115.99	DEG.	F
C	30	FUEL OUTLET	148.88	DEG.	F

END SCAN GROUP 1 16 JAN 88 15:05:50

STOPPED SINGLE SCAN 16 JAN 88 15:05:50

BEGIN SCAN GROUP 1 16 JAN 88 14:50:50
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	828.55	DEG.	F
C	2	EXHAUST 2	863.46	DEG.	F
C	3	EXHAUST 3	876.84	DEG.	F
C	4	EXHAUST 4	878.62	DEG.	F
C	5	EXHAUST 5	886.71	DEG.	F
C	6	EXHAUST 6	886.88	DEG.	F
C	7	ENG. COOL. IN	207.87	DEG.	F
C	8	ENG. COOL. OUT	217.32	DEG.	F
C	9	OIL SUMP	245.73	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	137.15	DEG.	F
C	14	RAD. TOP LEFT	154.23	DEG.	F
C	15	RAD. BTM LEFT	152.66	DEG.	F
C	16	RAD. TOP RIGHT	152.17	DEG.	F
C	17	RAD. BTM RIGHT	154.16	DEG.	F
C	18	GEN. AIR IN	121.96	DEG.	F
C	19	GEN. AIR OUT	164.86	DEG.	F
C	20	GEN. FRAME TOP	135.15	DEG.	F
C	21	GEN. FRAME BTM	137.64	DEG.	F
C	22	GEN. EXCITER	137.28	DEG.	F
C	23	GEN. VOLT. REG.	133.39	DEG.	F
C	24	CONTROL PANEL	133.68	DEG.	F
C	25	RELAY AREA	117.71	DEG.	F
C	26	BATTERY LEFT	135.25	DEG.	F
C	27	BATTERY RIGHT	133.19	DEG.	F
C	28	AIR IN SET	125.88	DEG.	F
C	29	FUEL TANK	113.29	DEG.	F
C	30	FUEL OUTLET	145.25	DEG.	F

END SCAN GROUP 1 16 JAN 88 14:50:59

STOPPED SINGLE SCAN 16 JAN 88 14:50:59

BEGIN SCAN GROUP 1 16 JAN 88 15:00:07
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	824.87	DEG.	F
C	2	EXHAUST 2	863.45	DEG.	F
C	3	EXHAUST 3	891.56	DEG.	F
C	4	EXHAUST 4	888.99	DEG.	F
C	5	EXHAUST 5	887.13	DEG.	F
C	6	EXHAUST 6	799.14	DEG.	F
C	7	ENG. COOL. IN	211.79	DEG.	F
C	8	ENG. COOL. OUT	219.35	DEG.	F
C	9	OIL SUMP	244.14	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	136.62	DEG.	F
C	14	RAD. TOP LEFT	156.46	DEG.	F
C	15	RAD. BTM LEFT	154.89	DEG.	F
C	16	RAD. TOP RIGHT	154.39	DEG.	F
C	17	RAD. BTM RIGHT	156.36	DEG.	F
C	18	GEN. AIR IN	123.53	DEG.	F
C	19	GEN. AIR OUT	166.27	DEG.	F
C	20	GEN. FRAME TOP	133.28	DEG.	F
C	21	GEN. FRAME BTM	139.49	DEG.	F
C	22	GEN. EXCITER	148.86	DEG.	F
C	23	GEN. VOLT. REG.	134.68	DEG.	F
C	24	CONTROL PANEL	135.41	DEG.	F
C	25	RELAY AREA	118.96	DEG.	F
C	26	BATTERY LEFT	138.62	DEG.	F
C	27	BATTERY RIGHT	134.47	DEG.	F
C	28	AIR IN SET	124.89	DEG.	F
C	29	FUEL TANK	116.42	DEG.	F
C	30	FUEL OUTLET	147.17	DEG.	F

END SCAN GROUP 1 16 JAN 88 15:00:17

STOPPED SINGLE SCAN 16 JAN 88 15:00:17

TEST DATA

MTS

ITEM 30 Kw, 40W/Hz

GENERATION SET

MODIFIED

MFG. L104 WELDING

MODEL NO. M10114A

SERIAL NO. R24 0323

National Technical Systems
Scientific Services Group
PO Box 38
Hartwood, Virginia 22471
Tel. 703 752 5300

REF. NO. MIL-STD 705; 655.1

SHEET 1 OF 1

DATE 18 JAN 1988

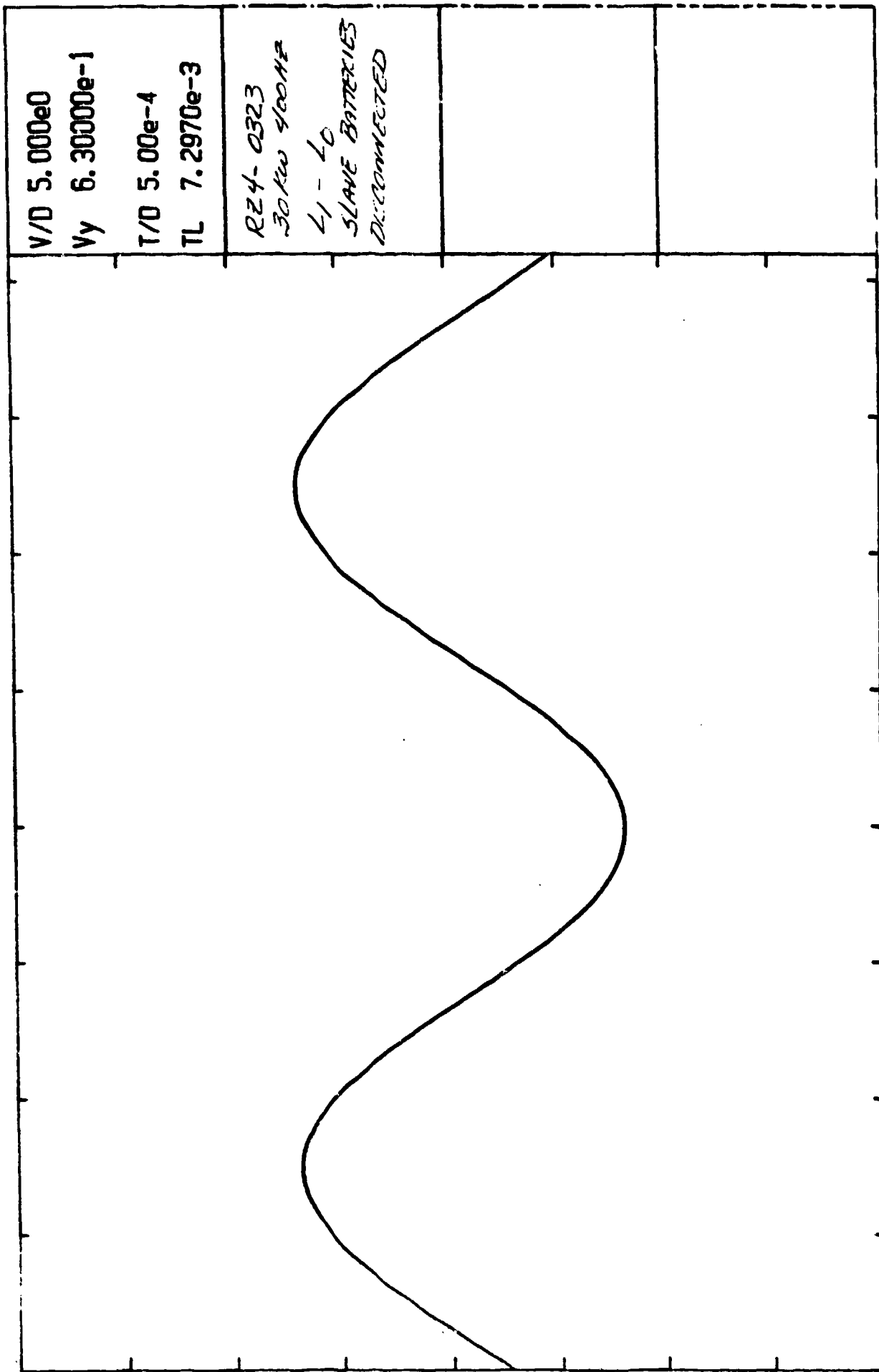
JOB NO. 555-2140

PROJ. ENGR.

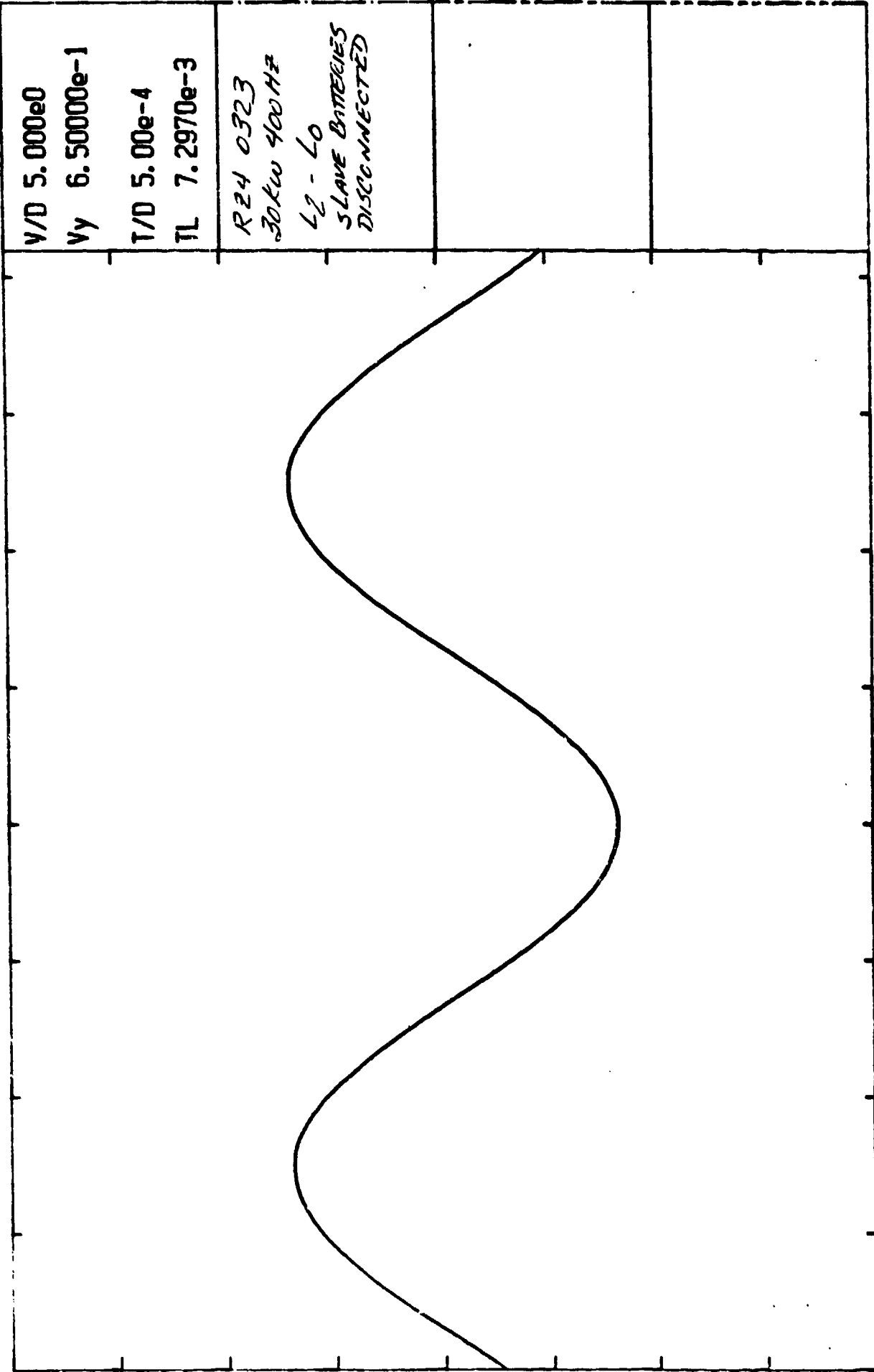
RECORDER/OBSERVER AM GC EJ

D.C. CONTROL TEST

INST TIME	STEP NO.	LOAD STEP	E60350 VOLTAGE			E60400 AMPERES			E60300 KILOWATTS			E60520 POWER FACTOR	E60860 FREQ. Hz	E61 VOLTS VDC	E61 AMPS DCA	AMB. TEMP. °F	ET/INT IN H2O
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw						
1841			VAC	STARTED UNIT	UNIT DOWN	11.16	SCALE BATTERIES										
1842				UNIT DOWN	UNIT DOWN												
1843				ATTEMPTED TO REVERSE	POLARITY OF BATTERY CABLES - COULD NOT CORRECT												
1844				STARTED UNIT ON	SCALE BATTERIES (NORMAL POLARITY)												
1845				APPLIED RATED LOAD													
1846		R/L	120	121	120.5	2.62	2.63	2.64	.25	.251	.252	.80	400.7	27.16	2.92	125	43/17
1847				REMOVED	SCALE CABLES - SET CONTINUOUS TO RUN												
1848		N/L												27.9	3.64		
1849		N/L												28.1	2.96		
1850		N/L												28.0	2.68		
1851		N/L												28.0	2.92		
1852		N/L												27.9	2.68		
1853		N/L												28.1	2.96		
1854		N/L												28.1	2.96		
1855		N/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80		28.1	2.96	124	44/16
1856		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80		28.1	2.96		
1857		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1858		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1859		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1860		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1861		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1862		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1863		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1864		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1865		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1866		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1867		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1868		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1869		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1870		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1871		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1872		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1873		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1874		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1875		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1876		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1877		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1878		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1879		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1880		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1881		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1882		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1883		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1884		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1885		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1886		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1887		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1888		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1889		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1890		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1891		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1892		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1893		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1894		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1895		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1896		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1897		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1898		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1899		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1900		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1901		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1902		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1903		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1904		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1905		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1906		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1907		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1908		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1909		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1910		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1911		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1912		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1913		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1914		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1915		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1916		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1917		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1918		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1919		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1920		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1921		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1922		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1923		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1924		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1925		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1926		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80					
1927		R/L	120	120.5	120	2.62	2.63	2.63	.251	.252	.252	.80			</		



B-333



V/D 5.000e0
Vy 6.50000e-1
T/D 5.00e-4
TL 7.2970e-3

R24 0323
30kw 400Hz
L2 - L0
SLAVE BATTERIES
DISCONNECTED

B-334

TL

Vx

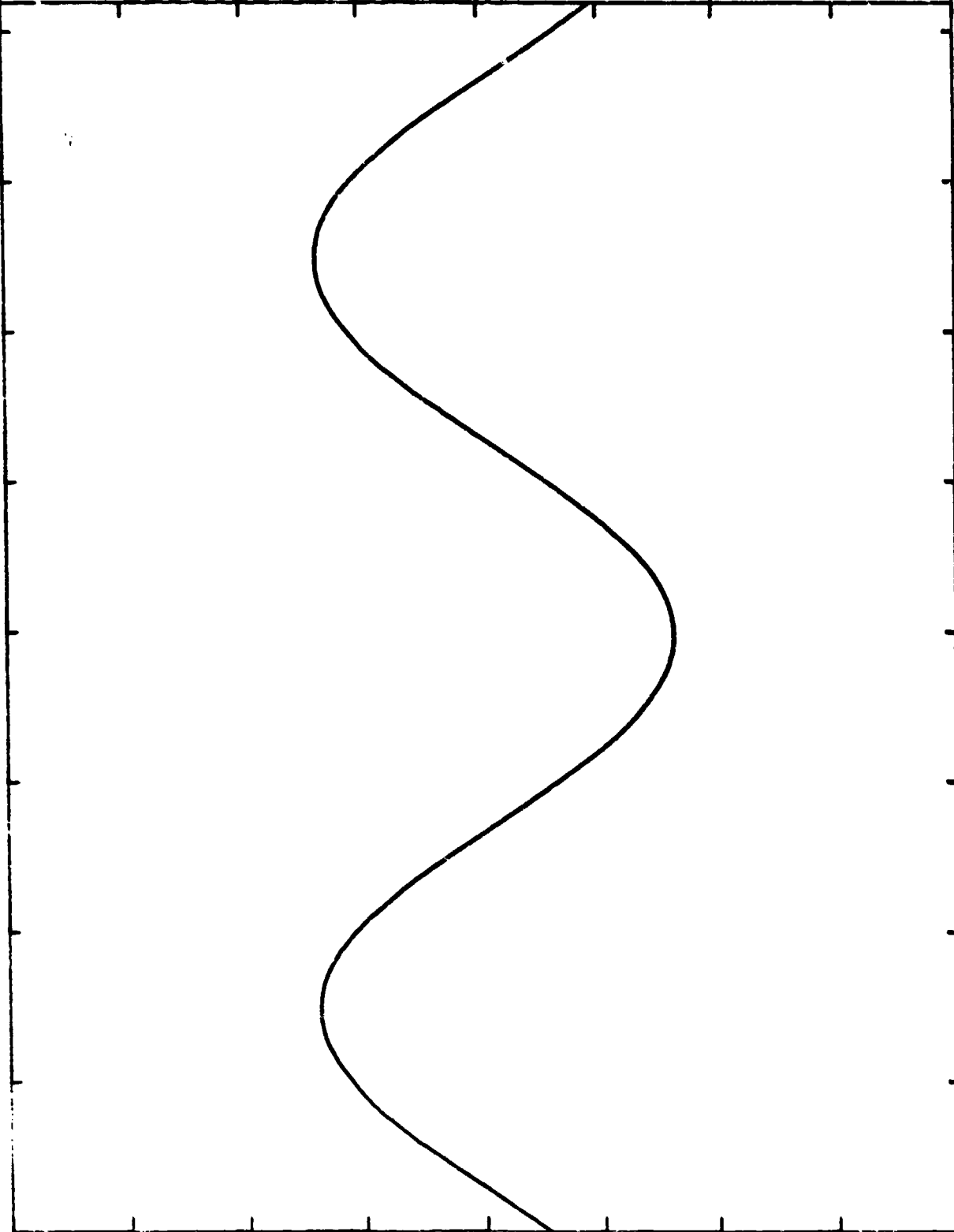
V/D 5.000e0

vy 6.40000e-1

T/D 5.00e-4

TL 7.2970e-3

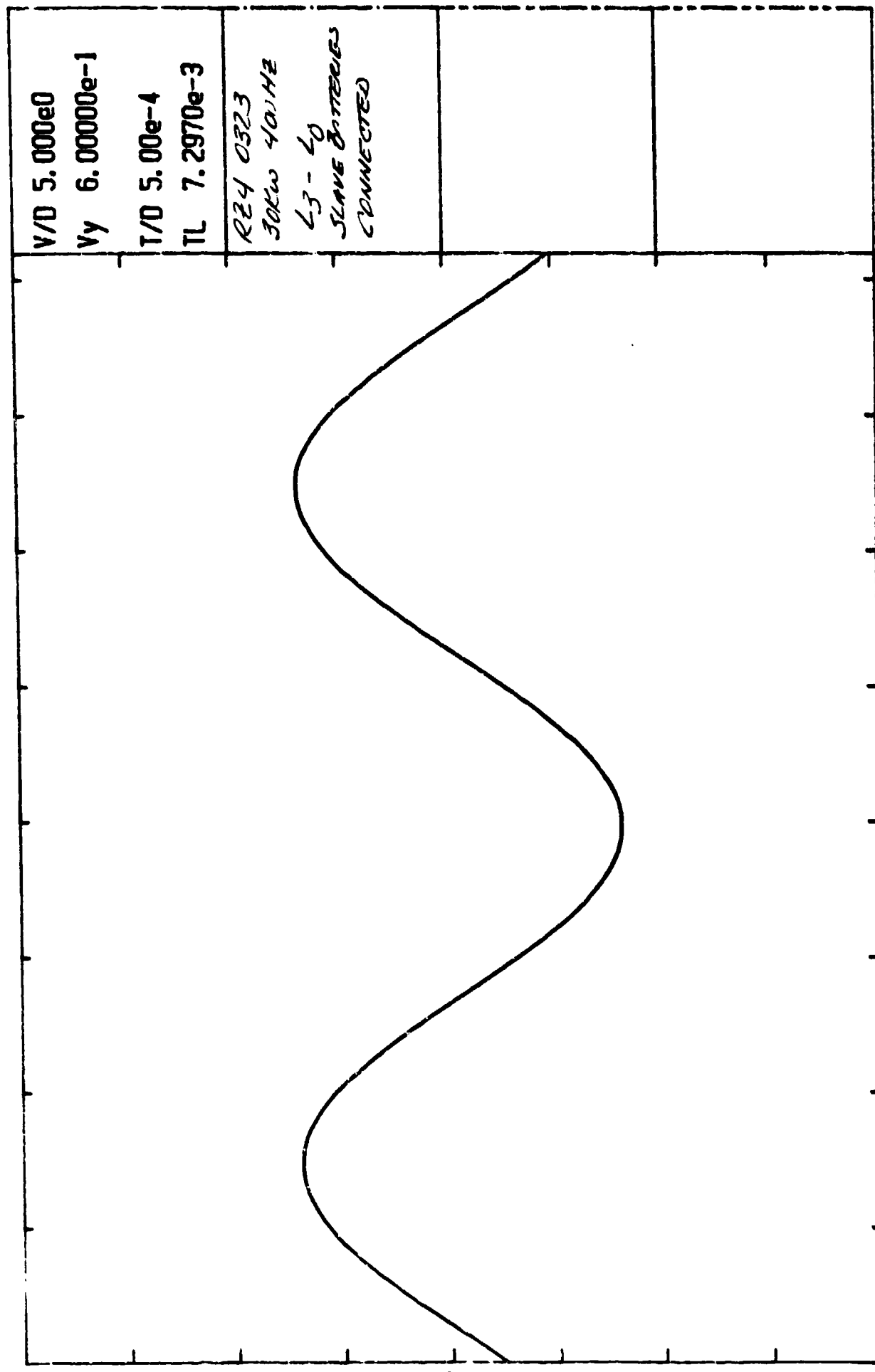
R24 0323
30 Hz, 400Hz
43-60
SLAVE BATTERIES
DISCONNECTED



XX

11

✓
B-335



V/D 5.000e0

Vy 6.00000e-1

T/D 5.00e-4

TL 7.2970e-3

R24 0323

30Kw 40MHz

L3-40

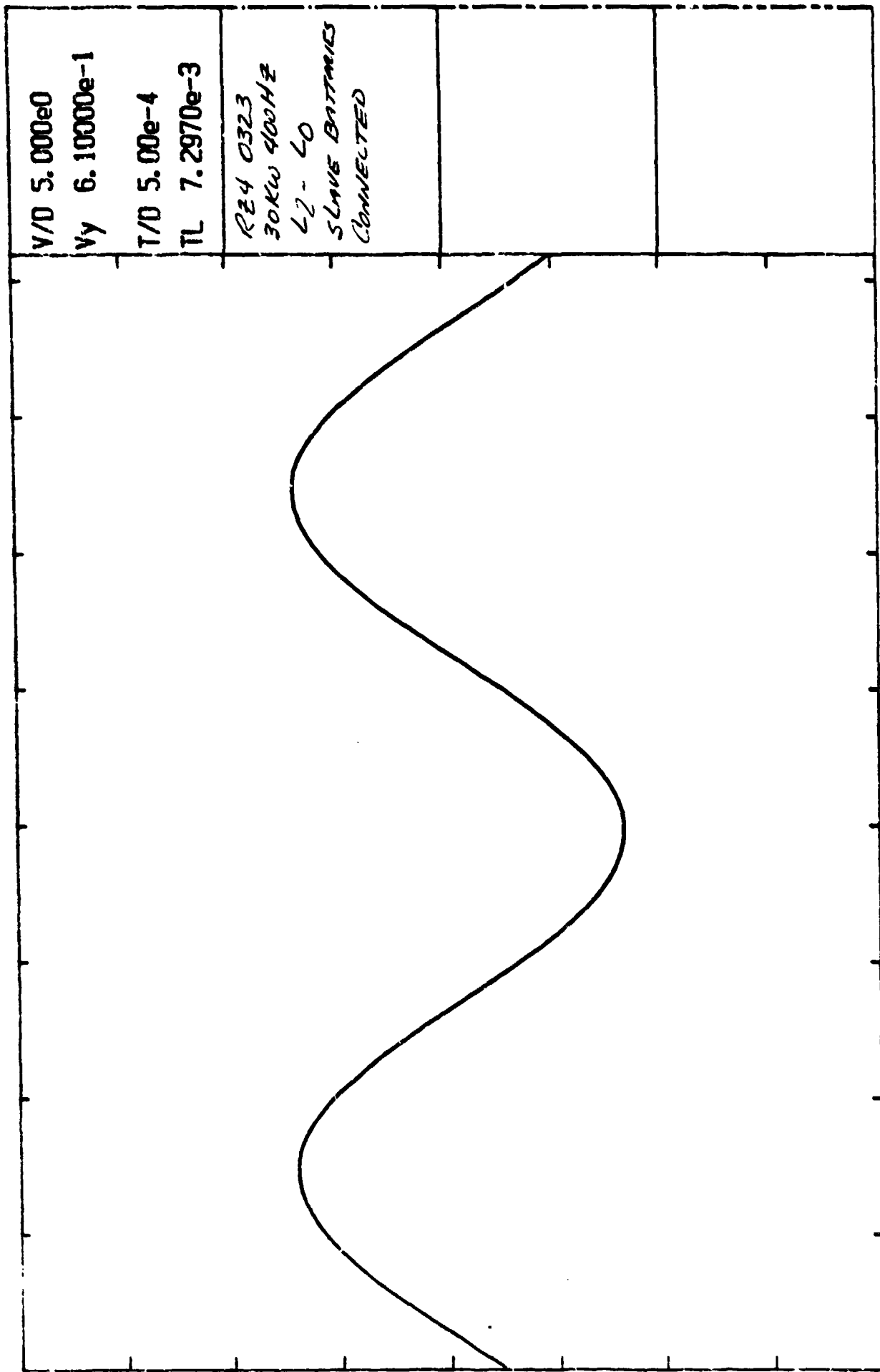
SLAVE BATTERIES

CONNECTED

B-336

Vx

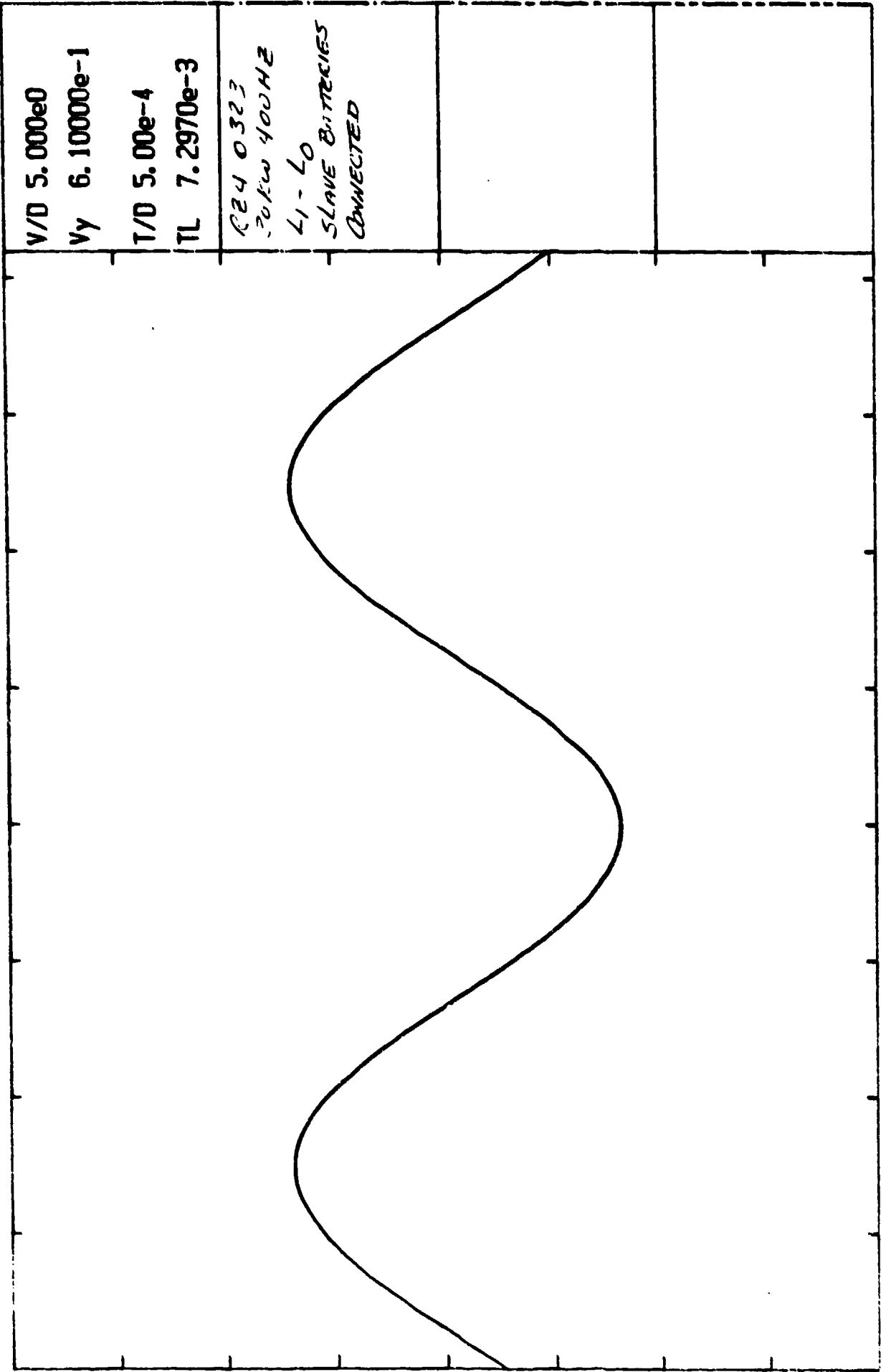
TL



B-337

TL

Vx



V/D 5.000e0

Vy 6.10000e-1

T/D 5.00e-4

TL 7.2970e-3

R24 0323

20KW 400HZ

L1 - L0

SLAVE BATTERIES
CONNECTED

B-338

Vx

TL

D.C. CONTROL METHOD 655.1

BEGIN SCAN GROUP 1 18 JAN 88 18:45:00
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	809.55	DEG.	F
C	2	EXHAUST 2	846.75	DEG.	F
C	3	EXHAUST 3	858.95	DEG.	F
C	4	EXHAUST 4	858.75	DEG.	F
C	5	EXHAUST 5	876.25	DEG.	F
C	6	EXHAUST 6	817.50	DEG.	F
C	7	ENG. COOL. IN	188.76	DEG.	F
C	8	ENG. COOL. OUT	194.67	DEG.	F
C	9	OIL SUMP	194.17	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	131.44	DEG.	F
C	14	RAD. TOP LEFT	141.87	DEG.	F
C	15	RAD. BTM LEFT	139.88	DEG.	F
C	16	RAD. TOP RIGHT	137.33	DEG.	F
C	17	RAD. BTM RIGHT	137.81	DEG.	F
C	18	GEN. AIR IN	127.81	DEG.	F
C	19	GEN. AIR OUT	153.49	DEG.	F
C	20	GEN. FRAME TOP	146.78	DEG.	F
C	21	GEN. FRAME BTM	137.34	DEG.	F
C	22	GEN. EXCITER	132.88	DEG.	F
C	23	GEN. VOLT. REG.	125.79	DEG.	F
C	24	CONTROL PANEL	125.48	DEG.	F
C	25	RELAY AREA	117.55	DEG.	F
C	26	BATTERY LEFT		OPEN	TC
C	27	BATTERY RIGHT		OPEN	TC
C	28	AIR IN SET	125.24	DEG.	F
C	29	FUEL TANK	118.84	DEG.	F
C	30	FUEL OUTLET	136.21	DEG.	F

END SCAN GROUP 1 18 JAN 88 18:45:09

STOPPED SINGLE SCAN 18 JAN 88 18:45:09

BEGIN SCAN GROUP 1 18 JAN 88 18:58:23
30 KW 400 HZ GEN SET S/N R24 8323

C	1	EXHAUST 1	839.65	DEG.	F
C	2	EXHAUST 2	879.24	DEG.	F
C	3	EXHAUST 3	891.68	DEG.	F
C	4	EXHAUST 4	894.86	DEG.	F
C	5	EXHAUST 5	894.79	DEG.	F
C	6	EXHAUST 6	829.84	DEG.	F
C	7	ENG. COOL. IN	286.87	DEG.	F
C	8	ENG. COOL. OUT	212.48	DEG.	F
C	9	OIL SUMP	232.93	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	137.81	DEG.	F
C	14	RAD. TOP LEFT	155.75	DEG.	F
C	15	RAD. BTM LEFT	151.36	DEG.	F
C	16	RAD. TOP RIGHT	148.39	DEG.	F
C	17	RAD. BTM RIGHT	148.48	DEG.	F
C	18	GEN. AIR IN	125.32	DEG.	F
C	19	GEN. AIR OUT	163.81	DEG.	F
C	20	GEN. FRAME TOP	158.98	DEG.	F
C	21	GEN. FRAME BTM	141.83	DEG.	F
C	22	GEN. EXCITER	148.82	DEG.	F
C	23	GEN. VOLT. REG.	131.81	DEG.	F
C	24	CONTROL PANEL	132.83	DEG.	F
C	25	RELAY AREA	128.82	DEG.	F
C	26	BATTERY LEFT		OPEN	TC
C	27	BATTERY RIGHT		OPEN	TC
C	28	AIR IN SET	124.63	DEG.	F
C	29	FUEL TANK	128.87	DEG.	F
C	30	FUEL OUTLET	145.32	DEG.	F

END SCAN GROUP 1 18 JAN 88 18:58:32

STOPPED SINGLE SCAN 18 JAN 88 18:58:32

TEST DATA

ITEM 30Kw/400 Hz

GENERATOR SET
MODIFIED

REF. LABD WLEWNG

MODEL NO. 1191A

SERIAL NO. R240325

NAS

National
Technical
Systems

Scientific
Services
Group
Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

MEASD 619.2

VOLTAGE D.P. & RSE

REF. NO. MIL-STD 705

SHEET 1 OF 1

DATE 18 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER KM/BC

LINE	STEP NO.	LOAD STEP	E-60230			E-60240			E-60250			E-60260			E-60270			E-60280			AMB. TEMP. °F	PRESS. IN/EXH	
			L1-L0	L2-L0	L3-L0	VAC	VAC	VAC	L1-L0	L2-L0	L3-L0	AC AMPS	DC AMPS	KW	L1-L0	L2-L0	L3-L0	POWER FACTOR	FREQ. Hz	VOLTS VDC			AMPS DCA
			VAC	VAC	VAC	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	UNIT	
			STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	
1453		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	16.6	5.7	125	125
1500		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.0	5.75	123	123
1510		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.0	5.75	125	125
1520		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.1	6.0	125	125
1530		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.1	6.0	125	125
1531		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.1	6.0	125	125
1532		ALL	122	122	122	122	122	122	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.0	4.2	125	125
1533		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	17.0	6.0	125	125
1535		ALL	122	122	122	122	122	122	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	11.8	4.2	124	124
1536		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	16.8	5.75	125	125
1537		ALL	122	122	122	122	122	122	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	11.8	4.15	124	124
1539		ALL	119.5	120	119.5	119.5	119.5	119.5	261	261	261	261	261	2.57	2.57	2.57	2.57	.80	400.9	16.6	5.7	123	123
1543		END OF TEST																					
1544		SAUT UNIT (DOWN)																					

B-340

DATA ON OSCILLOGRAPH NOT REQUIRED DUE TO UNDESIRABLE VOLTAGE CHANGES
OSCILLOGRAPH CHARTS AVAILABLE UPON REQUEST

NOTES:

B-340

VOLTAGE D.P. & Rise MATNO 619.2

BEGIN SCAN GROUP 1 18 JAN 88 15:00:11
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	831.49	DEG.	F
C	2	EXHAUST 2	876.78	DEG.	F
C	3	EXHAUST 3	893.71	DEG.	F
C	4	EXHAUST 4	887.28	DEG.	F
C	5	EXHAUST 5	891.29	DEG.	F
C	6	EXHAUST 6	834.14	DEG.	F
C	7	ENG. COOL. IN	200.62	DEG.	F
C	8	ENG. COOL. OUT	208.05	DEG.	F
C	9	OIL SUMP	214.58	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	131.86	DEG.	F
C	14	RAD. TOP LEFT	149.14	DEG.	F
C	15	RAD. BTM LEFT	147.16	DEG.	F
C	16	RAD. TOP RIGHT	149.21	DEG.	F
C	17	RAD. BTM RIGHT	149.19	DEG.	F
C	18	GEN. AIR IN	124.01	DEG.	F
C	19	GEN. AIR OUT	168.66	DEG.	F
C	20	GEN. FRAME TOP	138.41	DEG.	F
C	21	GEN. FRAME BTM	137.72	DEG.	F
C	22	GEN. EXCITER	136.58	DEG.	F
C	23	GEN. VOLT. REG.	133.22	DEG.	F
C	24	CONTROL PANEL	133.80	DEG.	F
C	25	RELAY AREA	118.53	DEG.	F
C	26	BATTERY LEFT	131.31	DEG.	F
C	27	BATTERY RIGHT	138.65	DEG.	F
C	28	AIR IN SET	125.24	DEG.	F
C	29	FUEL TANK	114.09	DEG.	F
C	30	FUEL OUTLET	143.47	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:00:20

STOPPED SINGLE SCAN 18 JAN 88 15:00:20

BEGIN SCAN GROUP 1 18 JAN 88 15:10:49
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	828.34	DEG.	F
C	2	EXHAUST 2	872.49	DEG.	F
C	3	EXHAUST 3	894.21	DEG.	F
C	4	EXHAUST 4	884.87	DEG.	F
C	5	EXHAUST 5	889.78	DEG.	F
C	6	EXHAUST 6	815.00	DEG.	F
C	7	ENG. COOL. IN	206.48	DEG.	F
C	8	ENG. COOL. OUT	216.15	DEG.	F
C	9	OIL SUMP	237.98	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	137.07	DEG.	F
C	14	RAD. TOP LEFT	153.19	DEG.	F
C	15	RAD. BTM LEFT	151.51	DEG.	F
C	16	RAD. TOP RIGHT	151.67	DEG.	F
C	17	RAD. BTM RIGHT	153.29	DEG.	F
C	18	GEN. AIR IN	122.63	DEG.	F
C	19	GEN. AIR OUT	165.25	DEG.	F
C	20	GEN. FRAME TOP	131.35	DEG.	F
C	21	GEN. FRAME BTM	140.82	DEG.	F
C	22	GEN. EXCITER	138.49	DEG.	F
C	23	GEN. VOLT. REG.	134.28	DEG.	F
C	24	CONTROL PANEL	135.10	DEG.	F
C	25	RELAY AREA	119.56	DEG.	F
C	26	BATTERY LEFT	137.47	DEG.	F
C	27	BATTERY RIGHT	135.49	DEG.	F
C	28	AIR IN SET	123.75	DEG.	F
C	29	FUEL TANK	114.98	DEG.	F
C	30	FUEL OUTLET	146.13	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:10:59

STOPPED SINGLE SCAN 18 JAN 88 15:10:59

BEGIN SCAN GROUP 1 18 JAN 88 15:20:02
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	831.39	DEG.	F
C	2	EXHAUST 2	882.98	DEG.	F
C	3	EXHAUST 3	895.77	DEG.	F
C	4	EXHAUST 4	887.17	DEG.	F
C	5	EXHAUST 5	891.51	DEG.	F
C	6	EXHAUST 6	813.62	DEG.	F
C	7	ENG. COOL. IN	209.28	DEG.	F
C	8	ENG. COOL. OUT	218.79	DEG.	F
C	9	OIL SUMP	245.82	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	136.27	DEG.	F
C	14	RAD. TOP LEFT	155.84	DEG.	F
C	15	RAD. BTM LEFT	153.47	DEG.	F
C	16	RAD. TOP RIGHT	155.32	DEG.	F
C	17	RAD. BTM RIGHT	155.01	DEG.	F
C	18	GEN. AIR IN	123.02	DEG.	F
C	19	GEN. AIR OUT	167.52	DEG.	F
C	20	GEN. FRAME TOP	135.61	DEG.	F
C	21	GEN. FRAME BTM	142.31	DEG.	F
C	22	GEN. EXCITER	139.33	DEG.	F
C	23	GEN. VOLT. REG.	135.68	DEG.	F
C	24	CONTROL PANEL	136.80	DEG.	F
C	25	RELAY AREA	120.51	DEG.	F
C	26	BATTERY LEFT	139.93	DEG.	F
C	27	BATTERY RIGHT	138.53	DEG.	F
C	28	AIR IN SET	125.73	DEG.	F
C	29	FUEL TANK	114.75	DEG.	F
C	30	FUEL OUTLET	146.93	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:20:12

STOPPED SINGLE SCAN 18 JAN 88 15:20:12

BEGIN SCAN GROUP 1 18 JAN 88 15:30:06
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	838.15	DEG.	F
C	2	EXHAUST 2	877.75	DEG.	F
C	3	EXHAUST 3	897.71	DEG.	F
C	4	EXHAUST 4	885.73	DEG.	F
C	5	EXHAUST 5	886.96	DEG.	F
C	6	EXHAUST 6	812.57	DEG.	F
C	7	ENG. COOL. IN	218.77	DEG.	F
C	8	ENG. COOL. OUT	219.47	DEG.	F
C	9	OIL SUMP	247.75	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	136.47	DEG.	F
C	14	RAD. TOP LEFT	155.34	DEG.	F
C	15	RAD. BTM LEFT	152.87	DEG.	F
C	16	RAD. TOP RIGHT	155.36	DEG.	F
C	17	RAD. BTM RIGHT	156.12	DEG.	F
C	18	GEN. AIR IN	123.35	DEG.	F
C	19	GEN. AIR OUT	169.96	DEG.	F
C	20	GEN. FRAME TOP	133.88	DEG.	F
C	21	GEN. FRAME BTM	148.90	DEG.	F
C	22	GEN. EXCITER	139.58	DEG.	F
C	23	GEN. VOLT. REG.	136.57	DEG.	F
C	24	CONTROL PANEL	137.29	DEG.	F
C	25	RELAY AREA	121.24	DEG.	F
C	26	BATTERY LEFT	148.59	DEG.	F
C	27	BATTERY RIGHT	138.88	DEG.	F
C	28	AIR IN SET	125.94	DEG.	F
C	29	FUEL TANK	117.28	DEG.	F
C	30	FUEL OUTLET	148.84	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:30:16

STOPPED SINGLE SCAN 18 JAN 88 15:30:16

BEGIN SCAN GROUP 1 18 JAN 88 15:31:18
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	831.58	DEG.	F
C	2	EXHAUST 2	882.68	DEG.	F
C	3	EXHAUST 3	893.59	DEG.	F
C	4	EXHAUST 4	885.78	DEG.	F
C	5	EXHAUST 5	891.86	DEG.	F
C	6	EXHAUST 6	811.76	DEG.	F
C	7	ENG. COOL. IN	218.51	DEG.	F
C	8	ENG. COOL. OUT	219.83	DEG.	F
C	9	OIL SUMP	249.94	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	137.51	DEG.	F
C	14	RAD. TOP LEFT	154.84	DEG.	F
C	15	RAD. BTM LEFT	153.18	DEG.	F
C	16	RAD. TOP RIGHT	154.44	DEG.	F
C	17	RAD. BTM RIGHT	156.26	DEG.	F
C	18	GEN. AIR IN	123.72	DEG.	F
C	19	GEN. AIR OUT	169.88	DEG.	F
C	20	GEN. FRAME TOP	136.69	DEG.	F
C	21	GEN. FRAME BTM	141.68	DEG.	F
C	22	GEN. EXCITER	138.69	DEG.	F
C	23	GEN. VOLT. REG.	136.84	DEG.	F
C	24	CONTROL PANEL	137.88	DEG.	F
C	25	RELAY AREA	121.17	DEG.	F
C	26	BATTERY LEFT	141.85	DEG.	F
C	27	BATTERY RIGHT	148.16	DEG.	F
C	28	AIR IN SET	125.88	DEG.	F
C	29	FUEL TANK	115.39	DEG.	F
C	30	FUEL OUTLET	148.99	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:31:28

STOPPED SINGLE SCAN 18 JAN 88 15:31:28

BEGIN SCAN GROUP 1 18 JAN 88 15:32:48
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	525.93	DEG.	F
C	2	EXHAUST 2	565.59	DEG.	F
C	3	EXHAUST 3	565.31	DEG.	F
C	4	EXHAUST 4	571.82	DEG.	F
C	5	EXHAUST 5	585.12	DEG.	F
C	6	EXHAUST 6	523.35	DEG.	F
C	7	ENG. COOL. IN	289.82	DEG.	F
C	8	ENG. COOL. OUT	217.24	DEG.	F
C	9	OIL SUMP	249.17	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	136.29	DEG.	F
C	14	RAD. TOP LEFT	154.88	DEG.	F
C	15	RAD. BTM LEFT	152.35	DEG.	F
C	16	RAD. TOP RIGHT	154.53	DEG.	F
C	17	RAD. BTM RIGHT	155.87	DEG.	F
C	18	GEN. AIR IN	123.14	DEG.	F
C	19	GEN. AIR OUT	168.52	DEG.	F
C	20	GEN. FRAME TOP	134.78	DEG.	F
C	21	GEN. FRAME BTM	141.67	DEG.	F
C	22	GEN. EXCITER	139.68	DEG.	F
C	23	GEN. VOLT. REG.	136.56	DEG.	F
C	24	CONTROL PANEL	137.58	DEG.	F
C	25	RELAY AREA	121.86	DEG.	F
C	26	BATTERY LEFT	141.28	DEG.	F
C	27	BATTERY RIGHT	139.68	DEG.	F
C	28	AIR IN SET	125.71	DEG.	F
C	29	FUEL TANK	116.96	DEG.	F
C	30	FUEL OUTLET	148.81	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:32:58

STOPPED SINGLE SCAN 18 JAN 88 15:32:58

BEGIN SCAN GROUP 1 18 JAN 88 15:33:28
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	595.94	DEG.	F
C	2	EXHAUST 2	666.18	DEG.	F
C	3	EXHAUST 3	673.72	DEG.	F
C	4	EXHAUST 4	672.27	DEG.	F
C	5	EXHAUST 5	681.99	DEG.	F
C	6	EXHAUST 6	598.78	DEG.	F
C	7	ENG. COOL. IN	286.81	DEG.	F
C	8	ENG. COOL. OUT	212.69	DEG.	F
C	9	OIL SUMP	248.33	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	136.73	DEG.	F
C	14	RAD. TOP LEFT	153.31	DEG.	F
C	15	RAD. BTM LEFT	151.34	DEG.	F
C	16	RAD. TOP RIGHT	153.95	DEG.	F
C	17	RAD. BTM RIGHT	154.92	DEG.	F
C	18	GEN. AIR IN	123.87	DEG.	F
C	19	GEN. AIR OUT	169.27	DEG.	F
C	20	GEN. FRAME TOP	135.16	DEG.	F
C	21	GEN. FRAME BTM	148.18	DEG.	F
C	22	GEN. EXCITER	139.53	DEG.	F
C	23	GEN. VOLT. REG.	136.92	DEG.	F
C	24	CONTROL PANEL	137.41	DEG.	F
C	25	RELAY AREA	121.81	DEG.	F
C	26	BATTERY LEFT	148.56	DEG.	F
C	27	BATTERY RIGHT	139.38	DEG.	F
C	28	AIR IN SET	125.74	DEG.	F
C	29	FUEL TANK	117.86	DEG.	F
C	30	FUEL OUTLET	149.38	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:33:37

STOPPED SINGLE SCAN 18 JAN 88 15:33:37

BEGIN SCAN GROUP 1 18 JAN 88 15:35:13
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	735.36	DEG.	F
C	2	EXHAUST 2	767.87	DEG.	F
C	3	EXHAUST 3	785.38	DEG.	F
C	4	EXHAUST 4	775.59	DEG.	F
C	5	EXHAUST 5	785.15	DEG.	F
C	6	EXHAUST 6	712.91	DEG.	F
C	7	ENG. COOL. IN	286.37	DEG.	F
C	8	ENG. COOL. OUT	214.19	DEG.	F
C	9	OIL SUMP	247.85	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	135.58	DEG.	F
C	14	RAD. TOP LEFT	153.15	DEG.	F
C	15	RAD. BTM LEFT	151.81	DEG.	F
C	16	RAD. TOP RIGHT	153.44	DEG.	F
C	17	RAD. BTM RIGHT	154.74	DEG.	F
C	18	GEN. AIR IN	122.76	DEG.	F
C	19	GEN. AIR OUT	168.25	DEG.	F
C	20	GEN. FRAME TOP	134.86	DEG.	F
C	21	GEN. FRAME BTM	141.66	DEG.	F
C	22	GEN. EXCITER	139.16	DEG.	F
C	23	GEN. VOLT. REG.	136.67	DEG.	F
C	24	CONTROL PANEL	137.45	DEG.	F
C	25	RELAY AREA	121.83	DEG.	F
C	26	BATTERY LEFT	141.13	DEG.	F
C	27	BATTERY RIGHT	139.71	DEG.	F
C	28	AIR IN SET	124.78	DEG.	F
C	29	FUEL TANK	117.14	DEG.	F
C	30	FUEL OUTLET	149.33	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:35:22

STOPPED SINGLE SCAN 18 JAN 88 15:35:23

BEGIN SCAN GROUP 1 18 JAN 88 15:36:23
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	538.65	DEG.	F
C	2	EXHAUST 2	605.73	DEG.	F
C	3	EXHAUST 3	596.92	DEG.	F
C	4	EXHAUST 4	602.31	DEG.	F
C	5	EXHAUST 5	618.69	DEG.	F
C	6	EXHAUST 6	529.21	DEG.	F
C	7	ENG. COOL. IN	202.84	DEG.	F
C	8	ENG. COOL. OUT	207.77	DEG.	F
C	9	OIL SUMP	247.67	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	135.98	DEG.	F
C	14	RAD. TOP LEFT	151.19	DEG.	F
C	15	RAD. BTM LEFT	149.17	DEG.	F
C	16	RAD. TOP RIGHT	152.19	DEG.	F
C	17	RAD. BTM RIGHT	153.31	DEG.	F
C	18	GEN. AIR IN	122.94	DEG.	F
C	19	GEN. AIR OUT	168.49	DEG.	F
C	20	GEN. FRAME TOP	136.13	DEG.	F
C	21	GEN. FRAME BTM	140.25	DEG.	F
C	22	GEN. EXCITER	138.35	DEG.	F
C	23	GEN. VOLT. REG.	136.95	DEG.	F
C	24	CONTROL PANEL	137.77	DEG.	F
C	25	RELAY AREA	128.98	DEG.	F
C	26	BATTERY LEFT	148.66	DEG.	F
C	27	BATTERY RIGHT	148.86	DEG.	F
C	28	AIR IN SET	125.28	DEG.	F
C	29	FUEL TANK	116.12	DEG.	F
C	30	FUEL OUTLET	148.78	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:36:32

STOPPED SINGLE SCAN 18 JAN 88 15:36:32

BEGIN SCAN GROUP 1 18 JAN 88 15:37:39
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	728.87	DEG.	F
C	2	EXHAUST 2	762.59	DEG.	F
C	3	EXHAUST 3	771.91	DEG.	F
C	4	EXHAUST 4	763.46	DEG.	F
C	5	EXHAUST 5	776.38	DEG.	F
C	6	EXHAUST 6	787.61	DEG.	F
C	7	ENG. COOL. IN	202.26	DEG.	F
C	8	ENG. COOL. OUT	209.78	DEG.	F
C	9	OIL SUMP	246.36	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	134.55	DEG.	F
C	14	RAD. TOP LEFT	151.39	DEG.	F
C	15	RAD. BTM LEFT	149.15	DEG.	F
C	16	RAD. TOP RIGHT	152.83	DEG.	F
C	17	RAD. BTM RIGHT	153.31	DEG.	F
C	18	GEN. AIR IN	122.65	DEG.	F
C	19	GEN. AIR OUT	167.54	DEG.	F
C	20	GEN. FRAME TOP	133.46	DEG.	F
C	21	GEN. FRAME BTM	148.96	DEG.	F
C	22	GEN. EXCITER	138.75	DEG.	F
C	23	GEN. VOLT. REG.	136.46	DEG.	F
C	24	CONTROL PANEL	137.37	DEG.	F
C	25	RELAY AREA	128.86	DEG.	F
C	26	BATTERY LEFT	141.84	DEG.	F
C	27	BATTERY RIGHT	139.42	DEG.	F
C	28	AIR IN SET	124.12	DEG.	F
C	29	FUEL TANK	117.45	DEG.	F
C	30	FUEL OUTLET	150.27	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:37:49

STOPPED SINGLE SCAN 18 JAN 88 15:37:49

BEGIN SCAN GROUP 1 18 JAN 88 15:39:21
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	541.42	DEG.	F
C	2	EXHAUST 2	608.63	DEG.	F
C	3	EXHAUST 3	608.66	DEG.	F
C	4	EXHAUST 4	605.48	DEG.	F
C	5	EXHAUST 5	616.98	DEG.	F
C	6	EXHAUST 6	535.97	DEG.	F
C	7	ENG. COOL. IN	193.94	DEG.	F
C	8	ENG. COOL. OUT	201.32	DEG.	F
C	9	OIL SUMP	244.85	DEG.	F
C	10	OIL GALLERY		OPEN	TC
C	13	ENG. INTAKE	132.84	DEG.	F
C	14	RAD. TOP LEFT	149.38	DEG.	F
C	15	RAD. BTM LEFT	147.16	DEG.	F
C	16	RAD. TOP RIGHT	150.47	DEG.	F
C	17	RAD. BTM RIGHT	152.84	DEG.	F
C	18	GEN. AIR IN	122.61	DEG.	F
C	19	GEN. AIR OUT	164.79	DEG.	F
C	20	GEN. FRAME TOP	138.91	DEG.	F
C	21	GEN. FRAME BTM	141.54	DEG.	F
C	22	GEN. EXCITER	139.23	DEG.	F
C	23	GEN. VOLT. REG.	136.87	DEG.	F
C	24	CONTROL PANEL	137.18	DEG.	F
C	25	RELAY AREA	128.66	DEG.	F
C	26	BATTERY LEFT	141.25	DEG.	F
C	27	BATTERY RIGHT	138.75	DEG.	F
C	28	AIR IN SET	123.75	DEG.	F
C	29	FUEL TANK	118.78	DEG.	F
C	30	FUEL OUTLET	151.87	DEG.	F

END SCAN GROUP 1 18 JAN 88 15:39:30

STOPPED SINGLE SCAN 18 JAN 88 15:39:30

TEST DATA

ITEM 30 Kw / 400 Hz
 GENERATOR SET
 MODIFIED
 MFCR. LUBBY WELDING
 MODEL NO. 114
 SERIAL NO. R24 0323

MS

National Technical Systems
 Scientific Services Group
 PO. Box 38
 Herndon, Virginia 22471
 Tel. 703 752 5300

REF. NO. MIL-STD 705 512.3C
 SHEET 1 OF 1
 DATE 1-18-88
 JOB NO. 555-2140
 PROJ. ENGR.

RECORDER/OBSERVER BJ/KR/RS

OVER VOLTAGE & UNDER VOLTAGE

INST TIME	LOAD STEP NO.	PLOTED VOLTAGE		AMPERES			KILOWATTS			POWER FACTOR	FREQ. Hz	EXCITER FIELD		AMB. TEMP. °F	PRESS. IN. WAT.
		L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC MFS	L2-L0 AC MFS	L3-L0 AC MFS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw		VOLTS VDC	AMPS DCA		
1707		STARTED UNIT TO													
1715		120	155								401.0			125	
1720		UNIT SHUT DOWN 0-V									401.0			127	
1721		120.5	156												
1723		END OF TEST													
		UNIT FAILED TO SHUT DOWN WHEN EXCESSIVE VOLTAGE WAS APPLIED													
		UNIT DID NOT SHUT DOWN AT 155 VOLTS WHICH IS OUT OF SPEC.													
		UNDER VOLTAGE TEST													
1746		STARTED UNIT TO CHECK OUT SET UP													
1750		SHUT UNIT DOWN													
1751		RESTARTED UNIT													
1753		STARTED TEST													
1753		LIGHTS ON UNIT STILL RUNNING													
1754		120	46								401.6			124	
1754		120	46								401.0			124	
1755		120	46								401.0			123	
1756		IMMEDIATELY CONTACTED UNIT AIRWAY GO OUT									400.7			125	
1759		120	99												
1759		UNIT RUMBLING LEAD BREAKER OPENED													
1759		"													
1759		"									400.7			124	
		120	99												
		120	73								400.7			125	
		120	73								400.3			124	
		120	73								400.7			124	
1801		END OF TEST													

UNIT FAILED UNDERVOLTAGE TEST - REQUIRED 150V TO TRIP AFTER 150V.

UNIT FAILED UNDERVOLTAGE TEST P. 23 seconds required to trip generator when at 99 VAC

NOTES:

ITEM 30 Kw / 400 Hz

Geological Survey

Model

NYGR. Libel Unknown

MODEL NO. *Neo 114A*

SERIAL NO. *824/0323*

WZL

**National
Technical
Systems**

**Scientific
Services
Group**

Testing Division
P.O. Box 38

Harlow, Virginia 22471

Tel: 703 752 5300

UNDERVOLTAGE TEST

METHOD 5/2.3 (COMPARISON RESULTS)

REF. NO. 416-570-205-

SHEET **OF** **30**

DATE 21 JAN 1988

JOB NO. 555-2140

PROJ. ENCR.

RECORDED/OBSERVER KM/RS/AJ/ct

TRIP TIME SEC.	TRIP VOLTS	INITIAL VOLTS	TRIP VOLTS	TRIP TIME SEC.
0.085	46	120	46	
0.089	46	120	46	
0.089	46	120	46	
0.234	99	120	99	
0.074	99	120	99	
7.984	99	120	99	
3.921	73	120	73	
3.875	73	120	73	
3.871	73	120	73	

8-385

TD - TIME DAY

ITEM 30kw / 460 Hz
GENERATOR SET
1/20 DIF 140

REC'D. LABBY WELDING
MODEL NO. 1144
SERIAL NO. 124 0323

NTS

National Technical Systems
Scientific Services Group
Testing Division
PO. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705
SHEET 1 OF 1
DATE 19 JAN 1988
JOB NO. 555-2140
PROJ. ENGR.
RECORDER/OBSERVER KM/GC

NOTED GOS. 1
MAX. POWER

TEST DATA

TEST STEP NO.	LOAD STEP	VOLTAGE			AMPERES			KJ OHMATS			POWER FACTOR	FREQ.	EXCITER VOLTS	AMPS DCA	TEMP. °F	PRESS. IN/OUT
		L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0						
0929	RL	119.5	120	120	2.61	2.61	2.62	2.5	2.57	2.57	.80	40.5	12.9	5.15	83	78.45
0930	RL	119.5	120	120	2.61	2.61	2.62	2.49	2.51	2.51	.80	40.6	13.8	5.45	86	77.53
0930	RL	119.5	120	120	2.61	2.61	2.62	2.49	2.51	2.51	.80	40.7	14.6	5.6	86	77.47
0940	RL	119.5	120	120	2.61	2.61	2.61	2.49	2.51	2.51	.80	40.7	14.4	5.7	90	77.47
0950	RL	119.5	120	120	2.61	2.61	2.61	2.49	2.51	2.51	.80	40.7	15.0	5.7	84	75.47
1003	MIP	120	121	121	3.08	3.06	3.01	3.08	3.72	3.7		40.3	12.6	4.7	91	72.53
1006	MIP	120	121	121	3.04	3.06	3.05	3.08	3.7	3.7		40.5	12.6	4.75	92	74.53
1008	MIP	120	121	121	3.04	3.06	3.05	3.08	3.7	3.7		40.1	12.6	4.75	90	73.53
1040	END OF TEST															
$\text{CORRECTED POWER} = \frac{27.923}{1.0442} = 26.74 \text{ KW}$																
$= 44.3 \text{ KW}$																
$= 48.6 \text{ KW}$																

B-346

BAROMETRIC PRESSURE - 27.923 CORRECTED POWER = 26.74 KW HP CORRECTION MADE FOR METRO 220.20
AUX MAX POWER = 44.3 KW, CORRECTED POWER = 48.6 KW at 102% of RATED POWER

NOTES:

MAX POWER TEST METHOD 640-1

BEGIN SCAN GROUP 1 19 JAN 88 08:59:36
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	731.27	DEG.	F
C	2	EXHAUST 2	761.30	DEG.	F
C	3	EXHAUST 3	793.94	DEG.	F
C	4	EXHAUST 4	804.82	DEG.	F
C	5	EXHAUST 5	823.56	DEG.	F
C	6	EXHAUST 6	767.05	DEG.	F
C	7	ENG. COOL. IN	88.649	DEG.	F
C	8	ENG. COOL. OUT	90.492	DEG.	F
C	9	OIL SUMP	118.13	DEG.	F
C	10	OIL GALLERY	112.71	DEG.	F
C	13	ENG. INTAKE	83.518	DEG.	F
C	14	RAD. TOP LEFT	90.035	DEG.	F
C	15	RAD. BTM LEFT	90.136	DEG.	F
C	16	RAD. TOP RIGHT	88.972	DEG.	F
C	17	RAD. BTM RIGHT	88.817	DEG.	F
C	18	GEN. AIR IN	79.521	DEG.	F
C	19	GEN. AIR OUT	93.430	DEG.	F
C	20	GEN. FRAME TOP	84.082	DEG.	F
C	21	GEN. FRAME BTM	85.001	DEG.	F
C	22	GEN. EXCITER	84.873	DEG.	F
C	23	GEN. VOLT. REG.	82.213	DEG.	F
C	24	CONTROL PANEL	82.599	DEG.	F
C	25	RELAY AREA	76.436	DEG.	F
C	26	BATTERY LEFT	88.060	DEG.	F
C	27	BATTERY RIGHT	79.421	DEG.	F
C	28	AIR IN SET	83.059	DEG.	F
C	29	FUEL TANK	81.521	DEG.	F
C	30	FUEL OUTLET	83.568	DEG.	F

END SCAN GROUP 1 19 JAN 88 08:59:45

STOPPED SINGLE SCAN 19 JAN 88 08:59:45

BEGIN SCAN GROUP 1 19 JAN 88 09:20:05
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	737.77	DEG.	F
C	2	EXHAUST 2	785.54	DEG.	F
C	3	EXHAUST 3	787.15	DEG.	F
C	4	EXHAUST 4	781.14	DEG.	F
C	5	EXHAUST 5	821.62	DEG.	F
C	6	EXHAUST 6	766.46	DEG.	F
C	7	ENG. COOL. IN	161.42	DEG.	F
C	8	ENG. COOL. OUT	188.09	DEG.	F
C	9	OIL SUMP	181.67	DEG.	F
C	10	OIL GALLERY	177.93	DEG.	F
C	13	ENG. INTAKE	101.31	DEG.	F
C	14	RAD. TOP LEFT	110.16	DEG.	F
C	15	RAD. BTM LEFT	109.69	DEG.	F
C	16	RAD. TOP RIGHT	107.35	DEG.	F
C	17	RAD. BTM RIGHT	109.17	DEG.	F
C	18	GEN. AIR IN	81.681	DEG.	F
C	19	GEN. AIR OUT	109.79	DEG.	F
C	20	GEN. FRAME TOP	94.029	DEG.	F
C	21	GEN. FRAME BTM	97.756	DEG.	F
C	22	GEN. EXCITER	93.701	DEG.	F
C	23	GEN. VOLT. REG.	91.401	DEG.	F
C	24	CONTROL PANEL	93.346	DEG.	F
C	25	RELAY AREA	77.745	DEG.	F
C	26	BATTERY LEFT	98.843	DEG.	F
C	27	BATTERY RIGHT	89.988	DEG.	F
C	28	AIR IN SET	86.170	DEG.	F
C	29	FUEL TANK	81.214	DEG.	F
C	30	FUEL OUTLET	87.397	DEG.	F

END SCAN GROUP 1 19 JAN 88 09:20:14

STOPPED SINGLE SCAN 19 JAN 88 09:20:14

BEGIN SCAN GROUP 1 19 JAN 88 09:30:00
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	754.04	DEG.	F
C	2	EXHAUST 2	791.10	DEG.	F
C	3	EXHAUST 3	825.41	DEG.	F
C	4	EXHAUST 4	821.42	DEG.	F
C	5	EXHAUST 5	852.71	DEG.	F
C	6	EXHAUST 6	791.20	DEG.	F
C	7	ENG. COOL. IN	174.99	DEG.	F
C	8	ENG. COOL. OUT	188.02	DEG.	F
C	9	OIL SUMP	206.03	DEG.	F
C	10	OIL GALLERY	206.56	DEG.	F
C	13	ENG. INTAKE	97.875	DEG.	F
C	14	RAD. TOP LEFT	114.67	DEG.	F
C	15	RAD. BTM LEFT	114.20	DEG.	F
C	16	RAD. TOP RIGHT	112.02	DEG.	F
C	17	RAD. BTM RIGHT	114.75	DEG.	F
C	18	GEN. AIR IN	84.297	DEG.	F
C	19	GEN. AIR OUT	116.77	DEG.	F
C	20	GEN. FRAME TOP	93.053	DEG.	F
C	21	GEN. FRAME BTM	97.643	DEG.	F
C	22	GEN. EXCITER	100.28	DEG.	F
C	23	GEN. VOLT. REG.	93.963	DEG.	F
C	24	CONTROL PANEL	95.501	DEG.	F
C	25	RELAY AREA	80.455	DEG.	F
C	26	BATTERY LEFT	93.915	DEG.	F
C	27	BATTERY RIGHT	93.053	DEG.	F
C	28	AIR IN SET	86.157	DEG.	F
C	29	FUEL TANK	83.479	DEG.	F
C	30	FUEL OUTLET	104.69	DEG.	F

END SCAN GROUP 1 19 JAN 88 09:30:10

STOPPED SINGLE SCAN 19 JAN 88 09:30:10

BEGIN SCAN GROUP 1 19 JAN 88 09:40:22
30 KW 400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	765.65	DEG.	F
C	2	EXHAUST 2	802.91	DEG.	F
C	3	EXHAUST 3	816.66	DEG.	F
C	4	EXHAUST 4	827.62	DEG.	F
C	5	EXHAUST 5	861.93	DEG.	F
C	6	EXHAUST 6	796.12	DEG.	F
C	7	ENG. COOL. IN	180.42	DEG.	F
C	8	ENG. COOL. OUT	189.45	DEG.	F
C	9	OIL SUMP	217.95	DEG.	F
C	10	OIL GALLERY	220.41	DEG.	F
C	13	ENG. INTAKE	100.53	DEG.	F
C	14	RAD. TOP LEFT	117.16	DEG.	F
C	15	RAD. BTM LEFT	116.27	DEG.	F
C	16	RAD. TOP RIGHT	115.14	DEG.	F
C	17	RAD. BTM RIGHT	117.95	DEG.	F
C	18	GEN. AIR IN	86.256	DEG.	F
C	19	GEN. AIR OUT	121.90	DEG.	F
C	20	GEN. FRAME TOP	97.248	DEG.	F
C	21	GEN. FRAME BTM	101.39	DEG.	F
C	22	GEN. EXCITER	102.67	DEG.	F
C	23	GEN. VOLT. REG.	96.821	DEG.	F
C	24	CONTROL PANEL	99.086	DEG.	F
C	25	RELAY AREA	82.461	DEG.	F
C	26	BATTERY LEFT	96.367	DEG.	F
C	27	BATTERY RIGHT	95.459	DEG.	F
C	28	AIR IN SET	90.029	DEG.	F
C	29	FUEL TANK	83.329	DEG.	F
C	30	FUEL OUTLET	109.70	DEG.	F

END SCAN GROUP 1 19 JAN 88 09:40:31

STOPPED SINGLE SCAN 19 JAN 88 09:40:31

BEGIN SCAN GROUP 1 19 JAN 88 09:58:00
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	765.88	DEG.	F
C	2	EXHAUST 2	887.58	DEG.	F
C	3	EXHAUST 3	828.91	DEG.	F
C	4	EXHAUST 4	822.08	DEG.	F
C	5	EXHAUST 5	853.87	DEG.	F
C	6	EXHAUST 6	794.31	DEG.	F
C	7	ENG. COOL. IN	178.70	DEG.	F
C	8	ENG. COOL. OUT	189.56	DEG.	F
C	9	OIL SUMP	222.34	DEG.	F
C	10	OIL GALLERY	224.02	DEG.	F
C	13	ENG. INTAKE	183.11	DEG.	F
C	14	RAD. TOP LEFT	118.81	DEG.	F
C	15	RAD. BTM LEFT	115.16	DEG.	F
C	16	RAD. TOP RIGHT	115.83	DEG.	F
C	17	RAD. BTM RIGHT	118.41	DEG.	F
C	18	GEN. AIR IN	86.288	DEG.	F
C	19	GEN. AIR OUT	125.57	DEG.	F
C	20	GEN. FRAME TOP	96.639	DEG.	F
C	21	GEN. FRAME BTM	183.22	DEG.	F
C	22	GEN. EXCITER	183.94	DEG.	F
C	23	GEN. VOLT. REG.	98.585	DEG.	F
C	24	CONTROL PANEL	181.14	DEG.	F
C	25	RELAY AREA	83.814	DEG.	F
C	26	BATTERY LEFT	98.552	DEG.	F
C	27	BATTERY RIGHT	96.819	DEG.	F
C	28	AIR IN SET	89.288	DEG.	F
C	29	FUEL TANK	85.883	DEG.	F
C	30	FUEL OUTLET	111.85	DEG.	F

END SCAN GROUP 1 19 JAN 88 09:58:10

STOPPED SINGLE SCAN 19 JAN 88 09:58:10

BEGIN SCAN GROUP 1 19 JAN 88 10:03:59
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	795.38	DEG.	F
C	2	EXHAUST 2	858.31	DEG.	F
C	3	EXHAUST 3	848.83	DEG.	F
C	4	EXHAUST 4	854.58	DEG.	F
C	5	EXHAUST 5	878.44	DEG.	F
C	6	EXHAUST 6	828.69	DEG.	F
C	7	ENG. COOL. IN	178.53	DEG.	F
C	8	ENG. COOL. OUT	188.29	DEG.	F
C	9	OIL SUMP	224.79	DEG.	F
C	10	OIL GALLERY	224.17	DEG.	F
C	13	ENG. INTAKE	186.83	DEG.	F
C	14	RAD. TOP LEFT	121.98	DEG.	F
C	15	RAD. BTM LEFT	117.33	DEG.	F
C	16	RAD. TOP RIGHT	118.68	DEG.	F
C	17	RAD. BTM RIGHT	128.55	DEG.	F
C	18	GEN. AIR IN	87.348	DEG.	F
C	19	GEN. AIR OUT	138.18	DEG.	F
C	20	GEN. FRAME TOP	183.17	DEG.	F
C	21	GEN. FRAME BTM	185.87	DEG.	F
C	22	GEN. EXCITER	184.17	DEG.	F
C	23	GEN. VOLT. REG.	181.72	DEG.	F
C	24	CONTROL PANEL	184.92	DEG.	F
C	25	RELAY AREA	85.299	DEG.	F
C	26	BATTERY LEFT	182.87	DEG.	F
C	27	BATTERY RIGHT	99.714	DEG.	F
C	28	AIR IN SET	91.247	DEG.	F
C	29	FUEL TANK	87.834	DEG.	F
C	30	FUEL OUTLET	113.89	DEG.	F

END SCAN GROUP 1 19 JAN 88 10:04:09

STOPPED SINGLE SCAN 19 JAN 88 10:04:09

BEGIN SCAN GROUP 1 19 JAN 88 10:04:52
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	1834.7	DEG.	F
C	2	EXHAUST 2	1893.2	DEG.	F
C	3	EXHAUST 3	1855.4	DEG.	F
C	4	EXHAUST 4	1877.6	DEG.	F
C	5	EXHAUST 5	1892.3	DEG.	F
C	6	EXHAUST 6	1887.8	DEG.	F
C	7	ENG. COOL. IN	181.62	DEG.	F
C	8	ENG. COOL. OUT	192.48	DEG.	F
C	9	OIL SUMP	224.92	DEG.	F
C	10	OIL GALLERY	227.89	DEG.	F
C	13	ENG. INTAKE	185.78	DEG.	F
C	14	RAD. TOP LEFT	123.87	DEG.	F
C	15	RAD. BTM LEFT	118.88	DEG.	F
C	16	RAD. TOP RIGHT	118.88	DEG.	F
C	17	RAD. BTM RIGHT	121.55	DEG.	F
C	18	GEN. AIR IN	89.183	DEG.	F
C	19	GEN. AIR OUT	128.66	DEG.	F
C	20	GEN. FRAME TOP	98.565	DEG.	F
C	21	GEN. FRAME BTM	187.62	DEG.	F
C	22	GEN. EXCITER	183.48	DEG.	F
C	23	GEN. VOLT. REG.	181.55	DEG.	F
C	24	CONTROL PANEL	184.95	DEG.	F
C	25	RELAY AREA	85.484	DEG.	F
C	26	BATTERY LEFT	182.88	DEG.	F
C	27	BATTERY RIGHT	188.48	DEG.	F
C	28	AIR IN SET	98.672	DEG.	F
C	29	FUEL TANK	84.648	DEG.	F
C	30	FUEL OUTLET	114.56	DEG.	F

END SCAN GROUP 1 19 JAN 88 10:05:02

STOPPED SINGLE SCAN 19 JAN 88 10:05:02

BEGIN SCAN GROUP 1 19 JAN 88 10:16:25
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	815.91	DEG.	F
C	2	EXHAUST 2	867.52	DEG.	F
C	3	EXHAUST 3	866.46	DEG.	F
C	4	EXHAUST 4	876.21	DEG.	F
C	5	EXHAUST 5	895.88	DEG.	F
C	6	EXHAUST 6	838.54	DEG.	F
C	7	ENG. COOL. IN	188.49	DEG.	F
C	8	ENG. COOL. OUT	188.95	DEG.	F
C	9	OIL SUMP	225.78	DEG.	F
C	10	OIL GALLERY	227.52	DEG.	F
C	13	ENG. INTAKE	187.27	DEG.	F
C	14	RAD. TOP LEFT	122.65	DEG.	F
C	15	RAD. BTM LEFT	118.38	DEG.	F
C	16	RAD. TOP RIGHT	119.59	DEG.	F
C	17	RAD. BTM RIGHT	121.67	DEG.	F
C	18	GEN. AIR IN	88.384	DEG.	F
C	19	GEN. AIR OUT	132.79	DEG.	F
C	20	GEN. FRAME TOP	182.29	DEG.	F
C	21	GEN. FRAME BTM	186.43	DEG.	F
C	22	GEN. EXCITER	185.59	DEG.	F
C	23	GEN. VOLT. REG.	184.11	DEG.	F
C	24	CONTROL PANEL	186.96	DEG.	F
C	25	RELAY AREA	85.952	DEG.	F
C	26	BATTERY LEFT	183.96	DEG.	F
C	27	BATTERY RIGHT	182.11	DEG.	F
C	28	AIR IN SET	92.961	DEG.	F
C	29	FUEL TANK	85.365	DEG.	F
C	30	FUEL OUTLET	115.46	DEG.	F

END SCAN GROUP 1 19 JAN 88 10:16:34

STOPPED SINGLE SCAN 19 JAN 88 10:16:34

BEGIN SCAN GROUP 1 19 JAN 88 10:16:45
38 KM/400 HZ GEN SET S/N R24 0323

C	1 EXHAUST 1	978.66 DEG.	F
C	2 EXHAUST 2	1028.0 DEG.	F
C	3 EXHAUST 3	1028.2 DEG.	F
C	4 EXHAUST 4	1043.5 DEG.	F
C	5 EXHAUST 5	1043.2 DEG.	F
C	6 EXHAUST 6	1018.8 DEG.	F
C	7 ENG. COOL. IN	101.20 DEG.	F
C	8 ENG. COOL. OUT	103.94 DEG.	F
C	9 OIL SUMP	223.71 DEG.	F
C	10 OIL GALLERY	224.90 DEG.	F
C	13 ENG. INTAKE	107.33 DEG.	F
C	14 RAD. TOP LEFT	122.06 DEG.	F
C	15 RAD. BTM LEFT	118.49 DEG.	F
C	16 RAD. TOP RIGHT	119.22 DEG.	F
C	17 RAD. BTM RIGHT	122.19 DEG.	F
C	18 GEN. AIR IN	88.722 DEG.	F
C	19 GEN. AIR OUT	130.07 DEG.	F
C	20 GEN. FRAME TOP	100.44 DEG.	F
C	21 GEN. FRAME BTM	103.97 DEG.	F
C	22 GEN. EXCITER	105.49 DEG.	F
C	23 GEN. VOLT. REG.	103.67 DEG.	F
C	24 CONTROL PANEL	107.07 DEG.	F
C	25 RELAY AREA	86.318 DEG.	F
C	26 BATTERY LEFT	104.47 DEG.	F
C	27 BATTERY RIGHT	101.89 DEG.	F
C	28 AIR IN SET	92.306 DEG.	F
C	29 FUEL TANK	85.603 DEG.	F
C	30 FUEL OUTLET	116.16 DEG.	F

END SCAN GROUP 1 19 JAN 88 10:16:54

STOPPED SINGLE SCAN 19 JAN 88 10:16:54

BEGIN SCAN GROUP 1 19 JAN 88 10:20:32
38 KM/400 HZ GEN SET S/N R24 0323

C	1 EXHAUST 1	818.13 DEG.	F
C	2 EXHAUST 2	852.95 DEG.	F
C	3 EXHAUST 3	868.78 DEG.	F
C	4 EXHAUST 4	875.75 DEG.	F
C	5 EXHAUST 5	890.32 DEG.	F
C	6 EXHAUST 6	824.04 DEG.	F
C	7 ENG. COOL. IN	101.09 DEG.	F
C	8 ENG. COOL. OUT	100.92 DEG.	F
C	9 OIL SUMP	224.44 DEG.	F
C	10 OIL GALLERY	228.16 DEG.	F
C	13 ENG. INTAKE	105.32 DEG.	F
C	14 RAD. TOP LEFT	123.28 DEG.	F
C	15 RAD. BTM LEFT	119.58 DEG.	F
C	16 RAD. TOP RIGHT	119.73 DEG.	F
C	17 RAD. BTM RIGHT	122.55 DEG.	F
C	18 GEN. AIR IN	88.450 DEG.	F
C	19 GEN. AIR OUT	132.34 DEG.	F
C	20 GEN. FRAME TOP	100.22 DEG.	F
C	21 GEN. FRAME BTM	109.23 DEG.	F
C	22 GEN. EXCITER	106.59 DEG.	F
C	23 GEN. VOLT. REG.	104.77 DEG.	F
C	24 CONTROL PANEL	107.49 DEG.	F
C	25 RELAY AREA	86.270 DEG.	F
C	26 BATTERY LEFT	104.77 DEG.	F
C	27 BATTERY RIGHT	101.75 DEG.	F
C	28 AIR IN SET	90.970 DEG.	F
C	29 FUEL TANK	88.557 DEG.	F
C	30 FUEL OUTLET	116.85 DEG.	F

END SCAN GROUP 1 19 JAN 88 10:20:41

STOPPED SINGLE SCAN 19 JAN 88 10:20:41

TEST DATA

ITEM 30 KW 400 Hz
GENERATOR SET

MODIFIED

HFGR. LIBBY WELDING

MODEL NO. MEP 114A

SERIAL NO. R24 0323



National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Highwood, Virginia 22471
Tel 703 752 5300

REF. NO. MIL-STD 705 Para. 608.1

SHEET 1 OF 1

DATE 19 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER GC/AM

(Short Term) (PES DROP)

INST. TIME	STEP NO.	LOAD STEP	EG0130 VOLTAGE			EG0400 AMPERES X40			EG2300 KILOWATTS X40			POWER FACTOR	EG0400 FREQ. Hz	EG6100 EXCITER VOLTS VDC	EG6100 AMPS DCA	AMB. TEMP. °F	PRESS. IN. WATER
			L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC RMS	L2-L0 AC RMS	L3-L0 AC RMS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw						
1040		R/L	119.2	120	119.5	2.6	2.61	2.61	2.49	2.51	2.51	.80	400.7	15.1	5.7	83	125.92
1040		R/L	119	120	119.5	2.6	2.61	2.61	2.45	2.51	2.51	.80	400.2	14.5	5.65	79	126.94
1050		R/L	119	120	119.5	2.61	2.62	2.62	2.45	2.51	2.51	.80	400.2	14.6	5.6	83	126.94
1100		R/L	119	120	119.5	2.6	2.61	2.61	2.45	2.51	2.51	.80	400.2	14.6	5.6	83	126.94
1110		R/L	119	119.5	119.5	2.61	2.61	2.62	2.49	2.51	2.51	.80	400.9	14.6	5.6	79	126.94
	1	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.2	3.95	83	126.94
	2	R/L	119	119.5	119.5	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	14.6	5.6	79	126.94
	3	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.2	3.95	83	126.94
	4	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.2	3.95	79	126.94
	5	R/L	119	119.5	119.5	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	14.6	5.6	79	126.94
	6	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.2	3.95	83	126.94
	7	R/L	119	120	119.5	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.1	3.75	83	126.94
	8	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	14.4	5.6	83	126.94
	9	R/L	119	120	119.5	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.1	3.9	83	126.94
	10	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	14.3	5.6	83	126.94
	11	R/L	119	120	119.5	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.0	3.9	83	126.94
	12	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	14.2	5.55	83	126.94
	13	R/L	119	120	119.5	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.9	10.0	3.9	82	126.94
	14	N/L	122	122	122	2.61	2.61	2.61	2.49	2.51	2.51	.80	400.8	10.0	3.9	78	126.94
1124		END OF TEST				SHORT UNIT 000000											

VOLTAGE RECOVERY TIME EXCEEDED 0.5 SEC VOLTAGE REGULATION EXCEEDED 1%

NOTES:

TEST DATA

ITEM 30KW 400Hz
GENERATOR SET
MODIFIED
MFR. KIDBY WELDON
MODEL NO. ME1114A
SERIAL NO. R240323

National Technical Systems
Scientific Services Group
Insling Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL STD 205
SHEET 1 OF 1
DATE 21 JAN 1988
JOB NO. 555 2140
PROJ. ENCR.
RECORDER/OBSERVER RS.

FREQUENCY AND VOLTAGE
REGULATION, STABILITY, AND TRANSIENT RESPONSE
TEST (SHORT TERM) (PRE DROP)

LOAD STEP	MAXIMUM EXCURSION		CONSTANT LOAD		REGULATION		MAXIMUM EXCURSION		VOLTAGE		REC. TIME		CONSTANT LOAD	
	OVERSHOOT HZ	UNDERSHOOT HZ	BANDWIDTH HZ	TIME SEC.	FREQ. HZ	VOLT	OVERSHOOT VOLT	UNDERSHOOT VOLT	VOLT	SEC.	BANDWIDTH HZ	TIME SEC.	VOLT	BANDWIDTH HZ
1-2	2.08	.52	.35	.39	.025	2.08	1.56	1.30		.65	.17	.15		
2-3		1.35	.17	.23	.025	2.08		1.56	1.30	.31	.17	.15		
3-4	2.26	.58	.26	.23	.025	2.08	1.22	1.01		.47	.17	.15		
4-5		1.74	.17	.31	.025	2.08		1.56	1.30	.31	.17	.15		
5-6	2.60	.65	.17	.31	.025	2.08	1.22	1.16		.47	.17	.15		
6-7		.82	.17	.31	.025	2.08		1.56	1.30	.31	.17	.15		
7-8	2.08	.52	.12	.31	.05	2.08	1.22	1.01		.47	.17	.15		
8-9		1.22	.17	.31	0	2.08		1.39	1.16	.35	.17	.15		
9-10	2.26	.56	.17	.23	.025	2.08	.87	.72		.47	.17	.15		
10-11		1.56	.17	.35	.025	2.08		.78	.65	.35	.17	.15		
11-12	2.08	.52	.17	.35	.025	2.08	1.62	1.30		.70	.17	.15		
12-13		1.56	.17	.23	0	2.08		1.39	1.16	.31	.17	.15		
13-14	2.08	.52	.17	.23	.025	2.08	1.39	1.16		.55	.17	.15		

VOLTAGE REGULATION EXCEEDED 1.20

NOTES:

PLC Data TEST 600.1

BEGIN SCAN GROUP 1 19 JAN 88 10:40:22
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	750.38	DEG.	F
C	2	EXHAUST 2	783.88	DEG.	F
C	3	EXHAUST 3	810.20	DEG.	F
C	4	EXHAUST 4	804.66	DEG.	F
C	5	EXHAUST 5	822.88	DEG.	F
C	6	EXHAUST 6	748.89	DEG.	F
C	7	ENG. COOL. IN	176.78	DEG.	F
C	8	ENG. COOL. OUT	187.42	DEG.	F
C	9	OIL SUMP	225.19	DEG.	F
C	10	OIL GALLERY	221.61	DEG.	F
C	13	ENG. INTAKE	184.44	DEG.	F
C	14	RAD. TOP LEFT	121.53	DEG.	F
C	15	RAD. BTM LEFT	116.86	DEG.	F
C	16	RAD. TOP RIGHT	116.89	DEG.	F
C	17	RAD. BTM RIGHT	119.42	DEG.	F
C	18	GEN. AIR IN	85.339	DEG.	F
C	19	GEN. AIR OUT	131.75	DEG.	F
C	20	GEN. FRAME TOP	97.538	DEG.	F
C	21	GEN. FRAME BTM	103.93	DEG.	F
C	22	GEN. EXCITER	102.63	DEG.	F
C	23	GEN. VOLT. REG.	103.38	DEG.	F
C	24	CONTROL PANEL	107.99	DEG.	F
C	25	RELAY AREA	84.138	DEG.	F
C	26	BATTERY LEFT	104.51	DEG.	F
C	27	BATTERY RIGHT	100.58	DEG.	F
C	28	AIR IN SET	89.226	DEG.	F
C	29	FUEL TANK	89.662	DEG.	F
C	30	FUEL OUTLET	115.87	DEG.	F

END SCAN GROUP 1 19 JAN 88 10:40:31

STOPPED SINGLE SCAN 19 JAN 88 10:40:31

BEGIN SCAN GROUP 1 19 JAN 88 10:50:04
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	748.14	DEG.	F
C	2	EXHAUST 2	775.43	DEG.	F
C	3	EXHAUST 3	804.36	DEG.	F
C	4	EXHAUST 4	805.81	DEG.	F
C	5	EXHAUST 5	828.78	DEG.	F
C	6	EXHAUST 6	736.40	DEG.	F
C	7	ENG. COOL. IN	174.84	DEG.	F
C	8	ENG. COOL. OUT	185.13	DEG.	F
C	9	OIL SUMP	222.84	DEG.	F
C	10	OIL GALLERY	218.91	DEG.	F
C	13	ENG. INTAKE	99.399	DEG.	F
C	14	RAD. TOP LEFT	115.73	DEG.	F
C	15	RAD. BTM LEFT	111.32	DEG.	F
C	16	RAD. TOP RIGHT	118.83	DEG.	F
C	17	RAD. BTM RIGHT	113.65	DEG.	F
C	18	GEN. AIR IN	77.266	DEG.	F
C	19	GEN. AIR OUT	125.98	DEG.	F
C	20	GEN. FRAME TOP	92.653	DEG.	F
C	21	GEN. FRAME BTM	99.478	DEG.	F
C	22	GEN. EXCITER	94.876	DEG.	F
C	23	GEN. VOLT. REG.	104.83	DEG.	F
C	24	CONTROL PANEL	107.88	DEG.	F
C	25	RELAY AREA	80.329	DEG.	F
C	26	BATTERY LEFT	100.36	DEG.	F
C	27	BATTERY RIGHT	98.780	DEG.	F
C	28	AIR IN SET	79.684	DEG.	F
C	29	FUEL TANK	88.319	DEG.	F
C	30	FUEL OUTLET	112.81	DEG.	F

END SCAN GROUP 1 19 JAN 88 10:50:14

STOPPED SINGLE SCAN 19 JAN 88 10:50:14

BEGIN SCAN GROUP 1 19 JAN 88 11:00:58
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	744.51	DEG.	F
C	2	EXHAUST 2	787.93	DEG.	F
C	3	EXHAUST 3	793.21	DEG.	F
C	4	EXHAUST 4	798.89	DEG.	F
C	5	EXHAUST 5	824.58	DEG.	F
C	6	EXHAUST 6	751.89	DEG.	F
C	7	ENG. COOL. IN	175.33	DEG.	F
C	8	ENG. COOL. OUT	185.24	DEG.	F
C	9	OIL SUMP	228.77	DEG.	F
C	10	OIL GALLERY	221.97	DEG.	F
C	13	ENG. INTAKE	99.591	DEG.	F
C	14	RAD. TOP LEFT	114.68	DEG.	F
C	15	RAD. BTM LEFT	111.21	DEG.	F
C	16	RAD. TOP RIGHT	109.35	DEG.	F
C	17	RAD. BTM RIGHT	113.15	DEG.	F
C	18	GEN. AIR IN	79.465	DEG.	F
C	19	GEN. AIR OUT	122.57	DEG.	F
C	20	GEN. FRAME TOP	92.485	DEG.	F
C	21	GEN. FRAME BTM	98.806	DEG.	F
C	22	GEN. EXCITER	94.359	DEG.	F
C	23	GEN. VOLT. REG.	101.12	DEG.	F
C	24	CONTROL PANEL	103.39	DEG.	F
C	25	RELAY AREA	78.846	DEG.	F
C	26	BATTERY LEFT	97.426	DEG.	F
C	27	BATTERY RIGHT	95.664	DEG.	F
C	28	AIR IN SET	83.232	DEG.	F
C	29	FUEL TANK	83.634	DEG.	F
C	30	FUEL OUTLET	109.11	DEG.	F

END SCAN GROUP 1 19 JAN 88 11:01:08

STOPPED SINGLE SCAN 19 JAN 88 11:01:08

BEGIN SCAN GROUP 1 19 JAN 88 11:10:08
30 KW/400 HZ GEN SET S/N R24 0323

C	1	EXHAUST 1	745.62	DEG.	F
C	2	EXHAUST 2	776.88	DEG.	F
C	3	EXHAUST 3	809.89	DEG.	F
C	4	EXHAUST 4	801.31	DEG.	F
C	5	EXHAUST 5	828.95	DEG.	F
C	6	EXHAUST 6	746.42	DEG.	F
C	7	ENG. COOL. IN	173.68	DEG.	F
C	8	ENG. COOL. OUT	185.16	DEG.	F
C	9	OIL SUMP	218.58	DEG.	F
C	10	OIL GALLERY	216.16	DEG.	F
C	13	ENG. INTAKE	97.748	DEG.	F
C	14	RAD. TOP LEFT	114.54	DEG.	F
C	15	RAD. BTM LEFT	110.85	DEG.	F
C	16	RAD. TOP RIGHT	110.38	DEG.	F
C	17	RAD. BTM RIGHT	112.73	DEG.	F
C	18	GEN. AIR IN	78.882	DEG.	F
C	19	GEN. AIR OUT	124.54	DEG.	F
C	20	GEN. FRAME TOP	91.969	DEG.	F
C	21	GEN. FRAME BTM	99.851	DEG.	F
C	22	GEN. EXCITER	94.447	DEG.	F
C	23	GEN. VOLT. REG.	99.877	DEG.	F
C	24	CONTROL PANEL	102.38	DEG.	F
C	25	RELAY AREA	78.962	DEG.	F
C	26	BATTERY LEFT	97.113	DEG.	F
C	27	BATTERY RIGHT	95.578	DEG.	F
C	28	AIR IN SET	83.854	DEG.	F
C	29	FUEL TANK	88.678	DEG.	F
C	30	FUEL OUTLET	108.33	DEG.	F

END SCAN GROUP 1 19 JAN 88 11:10:09

STOPPED SINGLE SCAN 19 JAN 88 11:10:09

TEST DATA

MAS

ITEM 30 kw 400 Hz

GENERATOR SET

MODIFIED

MFR. LIBBY WELDING

MODEL NO. MEP 114A

SERIAL NO. RZ4 0323

National Technical Systems
Scientific Services Group
Testing Division
P.O. Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

REF. NO. MLC STD 705

SHEET 1 OF 1

DATE 19 JAN 1988

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER RS.

FREQUENCY AND VOLTAGE REGULATION,

STABILITY, AND TRANSIENT RESPONSE TEST

(SHORT TERM) (POST DROP)

LOAD STEP	MAXIMUM EXCURSION				FREQUENCY				VOLTAGE			
	OVERSHOOT Hz	UNDERSHOOT Hz	CONSTANT LOAD BANDWIDTH Hz	REG. TIME SEC	OVERSHOOT %	UNDERSHOOT %	CONSTANT LOAD BANDWIDTH Hz	REG. TIME SEC	OVERSHOOT VOLT	UNDERSHOOT VOLT	CONSTANT LOAD BANDWIDTH VOLT	REG. TIME SEC
1	2.08	.52	.17	.31	.04	0	.17	.47	2.16	1.22	.17	.15
2			.17	.47	.04	0	.17	.39	2.16	1.01	.17	.15
3			.17	.31	.04	0	.17	.47	2.08	1.04	.17	.15
4	2.08	.52	.26	.31	.07	0	.26	.39	2.08	1.16	.17	.15
5			.17	.78	.04	.025	.17	.31	2.08	1.39	.17	.15
6	1.243	.61	.17	.31	.04	.05	.17	.23	2.08	1.16	.17	.15
7			.26	.31	.07	.05	.26	.39	2.16	1.22	.17	.15
8	2.26	.52	.17	.23	.04	0	.17	.39	2.16	1.01	.17	.15
9			.26	0	.07	.05	.26	.39	2.16	1.22	.17	.15
10	2.60	.65	.17	.31	.04	.025	.17	.23	2.16	1.01	.17	.15
11			.17	0	.04	.025	.17	.23	2.16	1.22	.17	.15
12	2.43	.61	.17	.23	.04	0	.17	.31	2.08	1.39	.17	.15
13			.26	0	.07	0	.26	.31	2.08	1.16	.17	.15
14	2.78	.69	.26	.39	.07	0	.26	.39	2.08	1.16	.17	.15

VOLTAGE REGULATION EXCEEDED 1%

NOTES:

POST DEEP TEST 608.1

BEGIN SCAN GROUP 1 19 JAN 88 14:30:01
30 KW 400 HZ GEN SET S/N R24 0323

C 1	EXHAUST 1	727.99	DEG. F
C 2	EXHAUST 2	758.97	DEG. F
C 3	EXHAUST 3	778.44	DEG. F
C 4	EXHAUST 4	797.44	DEG. F
C 5	EXHAUST 5	799.43	DEG. F
C 6	EXHAUST 6	725.57	DEG. F
C 7	ENG. COOL. IN	89.239	DEG. F
C 8	ENG. COOL. OUT	174.25	DEG. F
C 9	OIL SUMP	145.15	DEG. F
C 10	OIL GALLERY		OPEN TC
C 13	ENG. INTAKE	88.299	DEG. F
C 14	RAD. TOP LEFT	87.858	DEG. F
C 15	RAD. BTM LEFT	88.598	DEG. F
C 16	RAD. TOP RIGHT	86.125	DEG. F
C 17	RAD. BTM RIGHT	86.637	DEG. F
C 18	GEN. AIR IN	69.819	DEG. F
C 19	GEN. AIR OUT	95.755	DEG. F
C 20	GEN. FRAME TOP	78.181	DEG. F
C 21	GEN. FRAME BTM	76.196	DEG. F
C 22	GEN. EXCITER	74.851	DEG. F
C 23	GEN. VOLT. REG.	73.694	DEG. F
C 24	CONTROL PANEL	73.537	DEG. F
C 25	RELAY AREA	67.233	DEG. F
C 26	BATTERY LEFT	73.331	DEG. F
C 27	BATTERY RIGHT	72.892	DEG. F
C 28	AIR IN SET	69.398	DEG. F
C 29	FUEL TANK	71.748	DEG. F
C 30	FUEL OUTLET	81.833	DEG. F

END SCAN GROUP 1 19 JAN 88 14:30:11

STOPPED SINGLE SCAN 19 JAN 88 14:30:11

BEGIN SCAN GROUP 1 19 JAN 88 14:50:00
30 KW 400 HZ GEN SET S/N R24 0323

C 1	EXHAUST 1	732.38	DEG. F
C 2	EXHAUST 2	779.16	DEG. F
C 3	EXHAUST 3	792.49	DEG. F
C 4	EXHAUST 4	793.55	DEG. F
C 5	EXHAUST 5	814.46	DEG. F
C 6	EXHAUST 6	745.58	DEG. F
C 7	ENG. COOL. IN	164.37	DEG. F
C 8	ENG. COOL. OUT	185.81	DEG. F
C 9	OIL SUMP	218.48	DEG. F
C 10	OIL GALLERY		OPEN TC
C 13	ENG. INTAKE	98.523	DEG. F
C 14	RAD. TOP LEFT	104.74	DEG. F
C 15	RAD. BTM LEFT	103.81	DEG. F
C 16	RAD. TOP RIGHT	102.64	DEG. F
C 17	RAD. BTM RIGHT	104.26	DEG. F
C 18	GEN. AIR IN	78.547	DEG. F
C 19	GEN. AIR OUT	108.42	DEG. F
C 20	GEN. FRAME TOP	85.961	DEG. F
C 21	GEN. FRAME BTM	85.197	DEG. F
C 22	GEN. EXCITER	84.663	DEG. F
C 23	GEN. VOLT. REG.	82.334	DEG. F
C 24	CONTROL PANEL	84.454	DEG. F
C 25	RELAY AREA	71.472	DEG. F
C 26	BATTERY LEFT	91.724	DEG. F
C 27	BATTERY RIGHT	85.934	DEG. F
C 28	AIR IN SET	77.383	DEG. F
C 29	FUEL TANK	74.343	DEG. F
C 30	FUEL OUTLET	95.233	DEG. F

END SCAN GROUP 1 19 JAN 88 14:50:10

STOPPED SINGLE SCAN 19 JAN 88 14:50:10

BEGIN SCAN GROUP 1 19 JAN 88 14:40:03
30 KW/400 HZ GEN SET S/N R24 0323

C 1	EXHAUST 1	734.88	DEG. F
C 2	EXHAUST 2	775.26	DEG. F
C 3	EXHAUST 3	786.21	DEG. F
C 4	EXHAUST 4	799.25	DEG. F
C 5	EXHAUST 5	822.11	DEG. F
C 6	EXHAUST 6	743.31	DEG. F
C 7	ENG. COOL. IN	158.23	DEG. F
C 8	ENG. COOL. OUT	185.12	DEG. F
C 9	OIL SUMP	195.16	DEG. F
C 10	OIL GALLERY		OPEN TC
C 13	ENG. INTAKE	88.944	DEG. F
C 14	RAD. TOP LEFT	102.15	DEG. F
C 15	RAD. BTM LEFT	101.10	DEG. F
C 16	RAD. TOP RIGHT	99.491	DEG. F
C 17	RAD. BTM RIGHT	101.35	DEG. F
C 18	GEN. AIR IN	71.889	DEG. F
C 19	GEN. AIR OUT	104.43	DEG. F
C 20	GEN. FRAME TOP	85.169	DEG. F
C 21	GEN. FRAME BTM	82.311	DEG. F
C 22	GEN. EXCITER	82.284	DEG. F
C 23	GEN. VOLT. REG.	78.927	DEG. F
C 24	CONTROL PANEL	79.981	DEG. F
C 25	RELAY AREA	78.384	DEG. F
C 26	BATTERY LEFT	85.858	DEG. F
C 27	BATTERY RIGHT	81.925	DEG. F
C 28	AIR IN SET	69.938	DEG. F
C 29	FUEL TANK	72.376	DEG. F
C 30	FUEL OUTLET	98.453	DEG. F

END SCAN GROUP 1 19 JAN 88 14:40:12

STOPPED SINGLE SCAN 19 JAN 88 14:40:12

BEGIN SCAN GROUP 1 19 JAN 88 15:00:00
30 KW/400 HZ GEN SET S/N R24 0323

C 1	EXHAUST 1	736.87	DEG. F
C 2	EXHAUST 2	778.85	DEG. F
C 3	EXHAUST 3	796.97	DEG. F
C 4	EXHAUST 4	808.68	DEG. F
C 5	EXHAUST 5	817.18	DEG. F
C 6	EXHAUST 6	745.29	DEG. F
C 7	ENG. COOL. IN	165.37	DEG. F
C 8	ENG. COOL. OUT	185.68	DEG. F
C 9	OIL SUMP	216.89	DEG. F
C 10	OIL GALLERY		OPEN TC
C 13	ENG. INTAKE	91.281	DEG. F
C 14	RAD. TOP LEFT	103.71	DEG. F
C 15	RAD. BTM LEFT	102.49	DEG. F
C 16	RAD. TOP RIGHT	101.46	DEG. F
C 17	RAD. BTM RIGHT	103.61	DEG. F
C 18	GEN. AIR IN	66.156	DEG. F
C 19	GEN. AIR OUT	108.78	DEG. F
C 20	GEN. FRAME TOP	85.455	DEG. F
C 21	GEN. FRAME BTM	85.354	DEG. F
C 22	GEN. EXCITER	81.316	DEG. F
C 23	GEN. VOLT. REG.	85.637	DEG. F
C 24	CONTROL PANEL	87.669	DEG. F
C 25	RELAY AREA	71.397	DEG. F
C 26	BATTERY LEFT	93.373	DEG. F
C 27	BATTERY RIGHT	88.255	DEG. F
C 28	AIR IN SET	68.777	DEG. F
C 29	FUEL TANK	76.258	DEG. F
C 30	FUEL OUTLET	98.415	DEG. F

END SCAN GROUP 1 19 JAN 88 15:00:10

STOPPED SINGLE SCAN 19 JAN 88 15:00:10

Gen Set 30, kW 400 Hz

SN R270003

HIGH TEMPERATURE TEST (710.1c)

Regulator Range (511.1)	/
Frequency Adj. Range (511.2)	/
Circuit Interrupter (Short Circuit) (512.1)	OK
Circuit Interrupter (Overload Trip) (512.2)	/
Circuit Interrupter (512.3) (Overvoltage/Undervoltage)	*
Indicating Instrument (513.2)	*
Freq. and Voltage Regulation Stab. & Trans Response (608.1)	*
Freq. and Voltage Stability (Long Term) (608.2)	/
Voltage Dip & Rise (619.2)	/
DC Control (655.1)	/
Winding Resistance (401.1a)	/
710.1.3.2h HIGH TEMP START	/

BASELINE TESTS

SOUND LEVEL MIL STD 1474	*
FREQUENCY AND VOLTAGE REG. (608.1)	*

AMBIENT TESTS (Cont.)

PRE DROP (608.1)	/
GENERATOR DAMAGED BY DROP POST DROP (608.1) TEST	*

AMBIENT TEMPERATURE TESTS

Winding Resistance (401.1a)	/
MIL-STD-1474 Sound Level	OK
Drop Test (740.3b)	*
Max Power (640.1)	/
Overttemperature Protective Device (515.2)	/

* FAILED TEST

/ TESTS NOT CONDUCTED BECAUSE
OF OVERTEMP PROBLEMS / OR
GOVERNOR PROBLEMS

30 KW, 400 Hz
S/N KZ 7 0003

B-357



ACCOUNT BOOK 12" W x 24" H

100 PAGES	200 PAGES	300 PAGES	400 PAGES	500 PAGES	600 PAGES	700 PAGES	800 PAGES	900 PAGES	1000 PAGES
No. 874-100-J No. 874-100-LD No. 874-100-LD No. 874-100-LD	No. 874-200-J No. 874-200-LD No. 874-200-LD No. 874-200-LD	No. 874-300-J No. 874-300-LD No. 874-300-LD No. 874-300-LD	No. 874-400-J No. 874-400-LD No. 874-400-LD No. 874-400-LD	No. 874-500-J No. 874-500-LD No. 874-500-LD No. 874-500-LD	No. 874-600-J No. 874-600-LD No. 874-600-LD No. 874-600-LD	No. 874-700-J No. 874-700-LD No. 874-700-LD No. 874-700-LD	No. 874-800-J No. 874-800-LD No. 874-800-LD No. 874-800-LD	No. 874-900-J No. 874-900-LD No. 874-900-LD No. 874-900-LD	No. 874-1000-J No. 874-1000-LD No. 874-1000-LD No. 874-1000-LD

*LONG DAY SIZE 12" W x 24" H

BOORUM & PEASE CO. ELIZABETH, N.J. 07208 USA

W-80000

8-4-67 Checked WATER OK OS
" " OK OK
" Battery OK OS

8-18-67 Running Time 49.8
OK Presses to when running
Battery Chg. ammeter showing discharge runs
Crossion in ACT. Fuse holder
Changed voltage plate to 240V/6 OS
Ran unit at full load

9-18-67 052-1014 Ran Sando level TEST
RTM 51.0 - 51.2

6 October 1967
1055 Started unit to 300.6.2C
For 608.1 RTM 51.5 OS
1122 Shut down unit due to current
failure. RTM 52.1 OS

1130 Started unit to 300.6.2C
603.1 RTM 53.1 OS
1436 Shut unit down. test complete
RTM 53.3 OS

21 Jan 1968
Ran unit from 1055 OS

2 Feb 1968
1730 Started unit from 1055 set unit up
for 1055 Sando level test. OS
1806 Shut unit to 1055 Sando level
test.

1806 Checked Sando level from 1055
unit. Ran OS

1 FEB 1988

0930 Run unit in chamber and set
up for new temp observation test

11/4 Start unit after cold and for
flaring; 1/4 start steady test (start
temp) 600.1

* Note: Before starting overtemp measure
the fuel out to the fuel. Also
overtemp sensor has some issues to it.
Also note the fuel gauge does not
work. Fuel tank is full, gauge indicates
empty.

12/4 Start unit down coolant unit
temp 221°

14/5 Start unit after cold and
for current interlock test (start
current normal 512.1)

14/5 End of test start unit down

14/5 Start unit after cold and for
overtemp sensor normal 512.2

14/5 End of test start unit down

14/5 Start unit for maximum interlocks

14/5 End of test start unit down

5 FEB 1988

Start unit after cold and for

max fuel test normal 600.1

when attempting to start unit, unit

aborts not fire. Fuel gauge does not

work but when unit fires.

Attempts to start unit - unit would

crank but would not fire. Unit gives

impression of no fuel to injectors.

Loosened fuel fuel filter & tried

on fuel pump, now very small amount

of fuel. Refueled filter and injected

fuel supply hoses at injection pump

5 Feb 1988

No air visible @ fuel supply.
 Attempted to start unit, motor
 no movement in Governor pressure
 gauge. Checked. Manually
 moved throttle and Governor
 and unit started. Unit would
 continue to run as long as throttle
 was not fully open. Manually ran
 engine pressure up to check for
 high speed Governor operation.
 Starter Governor 2.0 to 2.5 RPM
 to overspeed condition before
 mechanical Governor took over.

Shut unit down and checked
 all Cables Connections. Rechecked
 fuel sol. PT in the Governor
 Control Unit + 3 turns. Attempted
 to start unit - unit ran at 1500
 RPM 412 Hz and fuel control turned
 down. Adjusted fuel sol. PT to
 obtain 2.5 Hz @ the maximum of
 fuel. Control at 1500. Unit
 operated for approx. 1 min. and
 shut down. Attempted to start -
 unit would not start. ~~Rechecked~~
 pressure fuel sol. PT. No change.
 Adjusted fuel sol. PT + 90°. No
 change.

Removed unit from chamber

It unit was too slow to

allow any of the fuel to

enter. Control stuck in 1500

RPM. After 15 min. in 1500

RPM unit had the Governor

and low fuel pressure, also in 1500

RPM. Unit was too slow to

APRIL 24th TEST, ATTENDED START
ON CHIT, CHIT STARTED. WHEN START
AND SCANNING AND MATH CLIPPING SAND
WAS COMING FROM CARTRIDGE. JUNE
DISINTEGRATION IN CARTRIDGE. FILLING FOR JUNE
WITH MATH JUNE, ALSO DOCT COPY
IN BOTTOM OF CARTRIDGE. FILLING SCREEN. BLO
NOTE ON INSIDE Baffles ON LEFT SIDE. SEE
WORKED ON BATTER - JUNE WHEN TYPING TO
OAK.

ELC

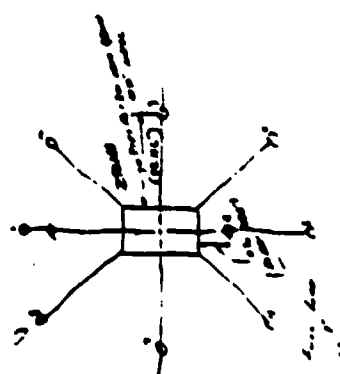
2

6

2. 3 1/2"

00 p

1009



TEST DATA

MAS

ITEM 30KW, 400HZ

GENERATOR SET

MFR. LIBBY WELDING

MODEL NO. MEP-114A

SERIAL NO. RZ 70003

National
Technical
SystemsScientific
Services
GroupTesting Division
PO Box 38
Hailwood, Virginia 22471
Tel: 703 752 5300

Frequency and Voltage

REF. NO. MIL-STD 705 Para. 608.1

SHEET 1 OF 2

DATE 6 OCTOBER 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER ENR/CMS

Regulation, Stability and Transient Response Test
(Short Term)

INST TIME	STEP NO.	LOAD STEP	VOLTAGE X/			AMPERES X40			KILOWATTS X40						POWER FACTOR	FREQ. Hz	EXCITER FIELD		AMB. TEMP. °F
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	Kw	Kv	Kw			VOLTS VDC	AMPS DCA	
1050	START	4A	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	0.80	400.1	12.2	6.2	66
1100	START	4A	120.0	120.0	120.0	2.62	2.64	2.65	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.4	4.9	66
1110	START	4A	120.0	119.5	120.0	2.61	2.64	2.65	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.5	4.9	66
1120	START	4A	120.0	120.0	119.5	2.60	2.63	2.65	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.5	4.9	66
1122	SWT UNIT DOWN: TRANSFORMER PROBLEM (71 KVARING IN CORRECTLY ARE TO GROUND 400V)																		
1330	START	4A	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	STARTED	0.80	400.1	12.8	5.03	70
1340	START	4A	120.0	121.0	120.0	2.63	2.65	2.66	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.9	5.04	70
1350	START	4A	120.0	121.0	120.0	2.62	2.65	2.66	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.9	5.04	71
1400	START	4A	120.0	121.0	120.0	2.62	2.65	2.66	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.9	5.04	71
1410	START	4A	120.0	121.0	120.0	2.62	2.65	2.66	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.9	5.04	71
1412	REGAIN 608.1																		
1412	1	4A	120.0	121.0	120.0	2.63	2.65	2.66	0.245	0.250	0.250	0.250	0.250	0.250	0.80	400.1	12.8	5.04	
	2	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.5	9.1	3.56	
	3	4A	120.0	121.0	120.0	2.64	2.66	2.67	0.247	0.251	0.251	0.251	0.251	0.251	0.80	400.5	12.9	5.04	
	4	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.5	9.1	3.60	
	5	4A	120.0	121.0	120.0	2.64	2.66	2.67	0.247	0.252	0.252	0.251	0.251	0.251	0.80	400.5	12.8	5.04	
	6	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.5	9.0	3.56	
	7	4A	120.0	121.0	120.0	2.63	2.66	2.67	0.247	0.252	0.252	0.251	0.251	0.251	0.80	400.5	12.8	5.04	
	8	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.5	9.1	3.56	
	9	4A	120.5	121.5	120.5	1.97	1.94	1.95	0.187	0.188	0.188	0.187	0.187	0.187	0.80	400.6	11.7	4.64	
	10	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.6	9.0	3.56	
	11	4A	120.5	121.0	120.5	1.96	1.95	1.95	0.186	0.187	0.187	0.186	0.186	0.186	0.80	400.6	11.7	4.56	
	12	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.5	9.1	3.52	
	13	4A	121.0	121.0	120.5	1.96	1.94	1.95	0.186	0.187	0.187	0.187	0.187	0.187	0.80	400.6	11.7	4.60	
	14	0	123.0	123.0	123.0	0	0	0	0	0	0	0	0	0	NA	400.6	8.9	3.56	
	15	4A	121.5	122.0	121.5	1.84	1.82	1.83	0.126	0.127	0.127	0.126	0.126	0.126	0.79	400.6	9.0	3.52	

NOTES:

ITEM 50KW, 400HZ

GENERATOR SET

MFGR. LIBBY WELDING

MODEL NO. MGP 114A

SERIAL NO. R270003

TEST DATA

REF. NO. MIL-STD 705 Para. 608.1

SHEET 2 OF 2

DATE 6 OCTOBER 1987

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER ENGT/CMS

National Technical Systems

Scientific Services Group

Testing Division

P.O. Box 38

Frequency and Voltage

Regulation, Stability and Transient Response Test

(Short Term)

1435

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END OF TEST

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TEST DATA

ITEM 30KW 400Hz
GENERATOR SET

NAS

REF. NO. MIL STD 705

SHEET 1 OF 3

DEGR. LIBBY WELAND
MODEL NO. MP 114A

National Technical Systems
Scientific Services Group
Testing Division
PO Box 30
Hartwood, Virginia 22471
Tel: 703 752 5300

DATE 13 NOV 1987

JOB NO. 555-2140

PROJ. ENGR.

SERIAL NO. R270003

FREQUENCY AND VOLTAGE REGULATION, TEST

RECORDER/OBSERVER G. C. ROSE

(SHEET 1 OF 1)

LOAD STEP	MAXIMUM EXCURSION			FREQUENCY			CONSTANT LOAD			VOLTAGE			CONSTANT LOAD		
	OVERS Hz	INTERS Hz	INTERS %	REC. TIME SEC	CONSTANT Hz	CONSTANT %	CONSTANT Hz	CONSTANT %	CONSTANT %	UNDER VOLT	UNDER %	UNDER %	CONSTANT Hz	CONSTANT %	CONSTANT %
1-2	2.0	.50		.35	.5	.125	0	2.5	.68	.56			.08	.066	
2-3		.17		0	.6	.15	0	2.5			1.2	1	.08	.066	
3-4	1.7	.425		.23	.43	.102	0	2.5	.68	.56			.08	.066	
4-5				0	.6	.15	0	2.5			1.0	.83	.08	.066	
5-6	2.4	.6		.35	.5	.125	0	2.5	.68	.56			.08	.066	
6-7		.3		.46	.6	.15	0	2.5			1.0	.83	.08	.066	
7-8	2.0	.5		.31	.43	.102	0	2.5	.86	.71			.08	.066	
8-9		0		0	.5	.125	.025	2.08			1.0	.83	.08	.066	
9-10	.86	.215		0	.5	.125	0	2.08	.86	.71			.08	.066	
10-11		.34		0	.6	.15	0	2.08			1.0	.83	.08	.066	
11-12	1.2	.3		0	.75	.182	.025	2.08	.68	.56			.08	.066	
12-13		.68		0	.5	.125	.025	2.08			1.2	1	.08	.066	
13-14	1.0	.25		0			0	2.08	.86	.71			.08	.066	

NOTES:

TEST DATA


REF. NO. ML 510 705SHEET 2 OF 3DATE 13 NOV 1987JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER G CARTER

National

Scientific

Technical

Services
Group
PO. Box 38
Haltwood, Virginia 22471

FREQUENCY AND VOLTAGE REGULATION, Tel: 703 752 5300.

STABILITY, AND TRANSIENT RESPONSE TEST

(SHORT TERM)

ITEM 30 KW 400Hz
GENERATOR SETMFR. L165Y WELANDICMODEL NO. MEP 114ASERIAL NO. RZ 70003

LOAD STEP	MAXIMUM EXCURSION				CONSTANT LOAD				REGULATION		MAXIMUM EXCURSION		UNDERSHOOT		REL. TIME		CONSTANT LOAD	
	OVERSHOOT Hz	UNDERSHOOT Hz	REC. TIME SEC	FREQ. Hz	REC. TIME SEC	OVERSHOOT Hz	UNDERSHOOT Hz	FREQ. Hz	VOLT %	REC. TIME SEC	OVERSHOOT VOLT	UNDERSHOOT VOLT	VOLT %	REC. TIME SEC	OVERSHOOT VOLT	UNDERSHOOT VOLT	VOLT %	REC. TIME SEC
14																		
14-15		.68	.17	0			.15	0	2.08				.68	.56		.31	.08	.066
15				0		.15		0	2.08		.50					0	.08	.066
15-16	.86	.215				.15		0	1.25				.68	.56		.23	.08	.066
16			0	0		.15		0	1.25								.08	.066
16-17						.15		0	1.25		.68					.155	.08	.066
17		.325		.465		.65	.162	0	1.25								.08	.066
17-18						.65		0	1.25				.68	.56		.31	.08	.066
18			0	0		.65	.162	0	1.25							0	.08	.066
18-19						.65		0	1.25		.50						.08	.066
19		.34		0		.15		0	.83				.34	.28		0	.08	.066
19-20						.15		0	.83								.08	.066
20			.375	.165		.15		0	.83		0						.08	.066
20-21						.15		0	.83								.08	.066
21		.215		0		.15		0	.83				.34	.28		0	.08	.066
21-22	.86					.15		0	.83								.08	.066
22			0	0		.15		0	.83								.08	.066
22-23						.15		0	.83		.50						.08	.066
23		.215		0		.75	.182	.025	.83				.34	.28		0	.08	.066
23-24	.86					.15		0	.83								.08	.066
24			0	0		.15		0	.83		0						.08	.066
24-25						.15		0	.83								.08	.066
25				0		.15		0	.83		0						.08	.066
25-26	1.0	.25				.65	.162	0	2.5				1.3	1.08		.155	.08	.066
26						.65		0	2.5								.08	.066
26-27			.125	0				0	2.5								.08	.066

NOTES:

TEST DATA



ITEM 30 KW 400 Hz
GENERATOR SET
 MFG. LIBBY WELDING
 MODEL NO. MEN 114A
 SERIAL NO. 127 0003

REF. NO. MIC STD 705
 SHEET 3 OF 3
 DATE 13 NOV 1987
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER G CARTER

National Technical Systems
 Scientific Services Group
 P.O. Box 38
 Hartwood, Virginia 22471
 Tel: 703 752 5300

FREQUENCY AND VOLTAGE REGULATION,
 STABILITY, AND TRANSIENT RESPONSE TEST
 (SHORT TERM)

LOAD STEP	MAXIMUM EXCURSION				REGULATION				MAXIMUM EXCURSION				VOLTAGE			
	OVERSHOOT	UNDERSHOOT	REC. TIME	CONSTANT LOAD BANDWIDTH	FREQ.	VOLT.	OVERSHOOT	UNDERSHOOT	REC. TIME	CONSTANT LOAD BANDWIDTH	REC. TIME	CONSTANT LOAD BANDWIDTH	OVERSHOOT	UNDERSHOOT	REC. TIME	CONSTANT LOAD BANDWIDTH
Hz	Hz	Hz	SEC	Hz	Hz	Hz	Hz	Hz	SEC	Hz	Hz	Hz	Hz	Hz	SEC	Hz
27	2.0	.5	.31	.6	0	2.5	1.0	.83							.15	.08 .066
28				.6	0	2.5									.08	.066
28-29		.34	.085	.65	0	2.5							1.3	1.08	.23	.08 .066
29					0	2.5	.68	.56							.15	.08 .066
29-30	2.7	.67	.21	.65	0	2.5	.62						1.2	1.0	.46	.08 .066
30		0	0	.65	0	2.5	.62								.23	.08 .066
30-31				.65	0	2.5	.62								.23	.08 .066
31			.23	.65	0	2.5	.62								.23	.08 .066
31-32	2.2	.55														
32																

B-369

NOTES:

DATE: 2 FEB 1985

TEST ITEM:	STATION:		TEST CONDUCTED BY:
-0 Kilo / 900 Hz CW Set			
RFG MODEL NO:	SERIAL NO:	HOUR METER:	TEST ITEM CONDITION:
118P 114A	K27 0003	53.5	Maintenance No CAD
TEMPERATURE: 68°F	HUMIDITY: 71%	TEST SITE: HARTZBURG	SURFACE: GRASS
BAROMETRIC PRESSURE:	SKY COVER:	STATIONARY OPERATION:	SEA STATE:
29.687		[X]	
WIND DIRECTION: NW	WIND VELOCITY: < 10 MPH	MICROPHONE: CW 1962	SOUND LEVEL METER:
			OCTAVE ANALYZER:
INTERIOR:	EXTERIOR:	TAPE RECORDER:	
	[X]	TAPE NO:	

[illegible]

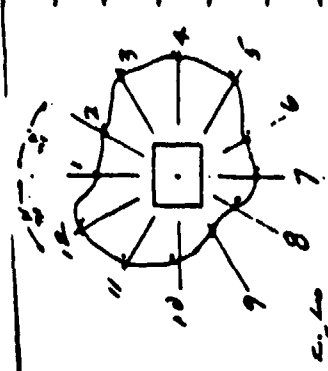
ACOUSTICAL TEST DATA

TEST ITEM:		STATION:		DATE: 2/28/98		TEST ITEM OPERATOR:	
1/2 Kw 400 Hz Gen Set				TIME: 1414		TEST CONDUCTED BY:	
REF/MODEL NO:	SERIAL NO:	ODOMETER:	HOURLY METER:	TEST ITEM CONDITION:			
MEP 114A	R27 0003		53.6	110011480			
TEMPERATURE:	HUMIDITY:	TEST SITE:		SEA STATE:		TERRAIN:	
68°F	71%	110011480		CLASS		Road Load	
BAROMETRIC PRESSURE:		SKY COVER:		HIGHWAY DRIVING:			
29.689				DRIVE BY: <input type="checkbox"/>			
WIND DIRECTION:	WIND VELOCITY:	MICROPHONE:		SOUND LEVEL METER:		OCTAVE ANALYZER:	
NW	< 10 MPH	CE 1862		CE 1982			
INTERIOR: <input type="checkbox"/>		MICROPHONE LOCATION:		TAPE RECORDER:		TAPE NO:	
EXTERIOR: <input checked="" type="checkbox"/>							

Position	Distance	dBA	dBC	dBB	ALL PASS	-80dB	83	125	250	500	1,000	2,000	4,000	8,000	REMARKS
1	7M	69.2	76.1	79.2	79.8	65.4	72.8	76.4	73.4	66.2	63.4	61.6	53.5	52.1	POSITION #1 AT
2	7M	70.3	75.7	79.2	82.1	69.2	73.2	75.9	73.7	67.1	65.5	63.2	57.1	53.5	EXHAUST END
3	7M	67.5	71.6	73.2	73.3	72.1	75.6	76.6	72.2	64.1	61.9	58.9	56.4	48.0	
4	7M	67.9	71.5	73.2	73.5	68.4	71.3	73.1	63.2	61.5	57.1	55.2	48.3		
5	7M	66.8	73.2	75.7	77.1	68.2	72.9	73.1	71.0	65.9	57.5	57.0	52.5	48.1	
6	7M	68.5	75.1	79.1	79.3	62.5	68.6	71.4	72.2	64.4	61.5	57.2	51.9	49.1	
7	7M	68.2	71.3	73.8	79.1	66.2	73.6	77.2	69.0	65.1	64.1	53.2	54.2	47.2	
8	7M	67.5	71.6	73.2	79.2	62.0	71.6	72.2	70.4	66.2	64.5	61.0	56.7	47.1	
9	0.7M	60.7	66.5	70.1	91.0	82.0	82.4	83.3	82.2	74.2	75.1	75.7	70.0	67.3	

TEST ITEM: 30KW/600WZ SN: RZ70003 HOUR METR: 53.9 UNMODIFIED MODIFIED
600WZ TEST SITE:
 TEMPERATURE: 65.0° HUMIDITY: 71% TERRAIN: OVERCAST
 SURFACE: GRASS SKY COVER: OVERCAST
 BAROMETRIC PRESSURE: 29.687 WIND VELOCITY: 10 MPH MICROPHONE: GE1962
 WIND DIRECTION: NW WIND VELOCITY: 10 MPH MICROPHONE LOCATION: 15 BELOW
 SOUND LEVEL METER: GE1962 OCNE AMPLIFIER: ---
 LOAD CONDITION: ✓ RATED --- NO LOAD

DATE	TIME	MICROPHONE POSITION	DISTANCE (FT)	DBA	REMARKS
22-68	1443	1	0	85	
		2	0	85	
		3	1'10"	85	
		4	1'9"	85	
		5	2'3"	85	
		6	0	85	
		7	6'8"	85	
		8	3'5"	85	
		9	2'2"	85	
		10	1'8"	85	
		11	1'11"	85	
		12	0	83.6	
22-68	1445				

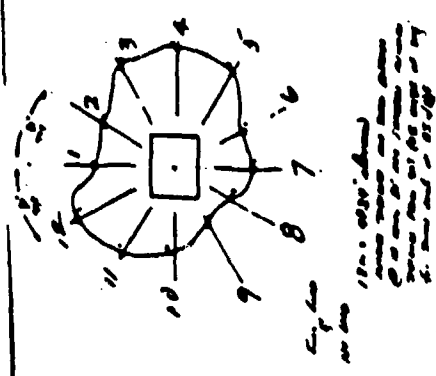


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TEST ITEM: 30 KW/4000 Hz GEN SET - MAXIMUM NOISE LEVEL - DBA

TEMPERATURE: 68° SN: KE 7 0003 HOUR METER: 540
 SURFACE: GRASS TERRAIN: UNMODIFIED
 BAROMETRIC PRESSURE: 29.687 SKY COVER: OVERCAST
 WIND DIRECTION: NEW WIND VELOCITY: < 10 MPH MICROPHONE: GK 1962
 SOUND LEVEL METER: GC 4982 OCTAVE ANALYZER:
 LOAD CONDITION: RATED NO LOAD MICROPHONE LOCATION: 15 BELOW

DATE	TIME	MICROPHONE POSITION	DISTANCE (ft)	DBA	REMARKS
2-1-88	1449	1	0	81.4	
		2	0	82.9	
		3	0	82.2	
		4	0	83.1	
		5	0	83.4	
		6	0	83.7	
		7	6'6"	85	
		8	3'6"	85	
		9	0	83.9	
		10	0	82.6	
		11	0	83.1	
		12	0	80.0	
2-1-88	1455				



B-374

BEGIN SCAN GROUP 1 04 FEB 88 11:24:17
30 KW 400 HZ GEN SET S/N R27 0007

C	1	EXHAUST 1	793.10	DEG.	F
C	2	EXHAUST 2	644.05	DEG.	F
C	3	EXHAUST 3	767.05	DEG.	F
C	4	EXHAUST 4	853.49	DEG.	F
C	7	ENG. COOL. IN	152.77	DEG.	F
C	8	ENG. COOL. OUT	177.76	DEG.	F
C	9	OIL SUMP	126.32	DEG.	F
C	10	OIL GALLERY	135.33	DEG.	F
C	13	ENG. INTAKE	117.67	DEG.	F
C	14	RAD. TOP LEFT	134.63	DEG.	F
C	15	RAD. BTM LEFT	132.69	DEG.	F
C	16	RAD. TOP RIGHT	132.28	DEG.	F
C	17	RAD. BTM RIGHT	131.12	DEG.	F
C	18	GEN. AIR IN	118.98	DEG.	F
C	19	GEN. AIR OUT	107.10	DEG.	F
C	20	GEN. FRAME TOP	99.904	DEG.	F
C	21	GEN. FRAME BTM	101.23	DEG.	F
C	22	GEN. EXCITER	117.06	DEG.	F
C	23	GEN. VOLT. REG.	100.81	DEG.	F
C	24	CONTROL PANEL	103.73	DEG.	F
C	25	RELAY AREA	120.28	DEG.	F
C	26	BATTERY LEFT	102.31	DEG.	F
C	27	BATTERY RIGHT	98.041	DEG.	F
C	28	AIR IN SET	125.22	DEG.	F
C	29	FUEL TANK	58.981	DEG.	F
C	30	FUEL OUTLET	94.389	DEG.	F

END SCAN GROUP 1 04 FEB 88 11:24:26

STOPPED SINGLE SCAN 04 FEB 88 11:24:26

BEGIN SCAN GROUP 1 04 FEB 88 11:40:15
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	823.34	DEG.	F
C	2	EXHAUST 2	678.92	DEG.	F
C	3	EXHAUST 3	799.69	DEG.	F
C	4	EXHAUST 4	877.20	DEG.	F
C	7	ENG. COOL. IN	198.99	DEG.	F
C	8	ENG. COOL. OUT	209.74	DEG.	F
C	9	OIL SUMP	210.84	DEG.	F
C	10	OIL GALLERY	215.92	DEG.	F
C	13	ENG. INTAKE	134.98	DEG.	F
C	14	RAD. TOP LEFT	156.57	DEG.	F
C	15	RAD. BTM LEFT	152.59	DEG.	F
C	16	RAD. TOP RIGHT	145.60	DEG.	F
C	17	RAD. BTM RIGHT	152.59	DEG.	F
C	18	GEN. AIR IN	124.23	DEG.	F
C	19	GEN. AIR OUT	142.95	DEG.	F
C	20	GEN. FRAME TOP	142.53	DEG.	F
C	21	GEN. FRAME BTM	128.61	DEG.	F
C	22	GEN. EXCITER	136.05	DEG.	F
C	23	GEN. VOLT. REG.	122.04	DEG.	F
C	24	CONTROL PANEL	125.47	DEG.	F
C	25	RELAY AREA	134.89	DEG.	F
C	26	BATTERY LEFT	136.82	DEG.	F
C	27	BATTERY RIGHT	117.70	DEG.	F
C	28	AIR IN SET	125.98	DEG.	F
C	29	FUEL TANK	68.339	DEG.	F
C	30	FUEL OUTLET	130.35	DEG.	F

END SCAN GROUP 1 04 FEB 88 11:40:24

STOPPED SINGLE SCAN 04 FEB 88 11:40:24

BEGIN SCAN GROUP 1 04 FEB 88 11:50:28
30 KW 400 HZ GEN SET S/N R27 0007

C	1	EXHAUST 1	829.13	DEG.	F
C	2	EXHAUST 2	683.53	DEG.	F
C	3	EXHAUST 3	807.92	DEG.	F
C	4	EXHAUST 4	885.41	DEG.	F
C	7	ENG. COOL. IN	206.56	DEG.	F
C	8	ENG. COOL. OUT	215.66	DEG.	F
C	9	OIL SUMP	232.44	DEG.	F
C	10	OIL GALLERY	235.96	DEG.	F
C	13	ENG. INTAKE	136.07	DEG.	F
C	14	RAD. TOP LEFT	158.92	DEG.	F
C	15	RAD. BTM LEFT	155.37	DEG.	F
C	16	RAD. TOP RIGHT	149.39	DEG.	F
C	17	RAD. BTM RIGHT	157.43	DEG.	F
C	18	GEN. AIR IN	120.79	DEG.	F
C	19	GEN. AIR OUT	151.53	DEG.	F
C	20	GEN. FRAME TOP	150.05	DEG.	F
C	21	GEN. FRAME BTM	132.44	DEG.	F
C	22	GEN. EXCITER	138.10	DEG.	F
C	23	GEN. VOLT. REG.	127.53	DEG.	F
C	24	CONTROL PANEL	130.94	DEG.	F
C	25	RELAY AREA	135.54	DEG.	F
C	26	BATTERY LEFT	144.18	DEG.	F
C	27	BATTERY RIGHT	125.09	DEG.	F
C	28	AIR IN SET	124.24	DEG.	F
C	29	FUEL TANK	72.305	DEG.	F
C	30	FUEL OUTLET	140.53	DEG.	F

END SCAN GROUP 1 04 FEB 88 11:50:37

STOPPED SINGLE SCAN 04 FEB 88 11:50:37

BEGIN SCAN GROUP 0 04 FEB 88 12:00:45
GO

C	0		.00000		
C	1	EXHAUST 1	831.55	DEG.	F
C	2	EXHAUST 2	684.85	DEG.	F
C	3	EXHAUST 3	816.56	DEG.	F
C	4	EXHAUST 4	887.45	DEG.	F
C	5	EXHAUST 5	882.52	DEG.	F
C	6	EXHAUST 6	784.96	DEG.	F
C	7	ENG. COOL. IN	211.43	DEG.	F
C	8	ENG. COOL. OUT	221.26	DEG.	F
C	9	OIL SUMP	241.89	DEG.	F
C	10	OIL GALLERY	244.27	DEG.	F
C	11	OIL COOLER IN		OPEN	TC
C	12	OIL COOLER OUT		OPEN	TC
C	13	ENG. INTAKE	138.63	DEG.	F
C	14	RAD. TOP LEFT	162.56	DEG.	F
C	15	RAD. BTM LEFT	158.42	DEG.	F
C	16	RAD. TOP RIGHT	154.61	DEG.	F
C	17	RAD. BTM RIGHT	160.31	DEG.	F
C	18	GEN. AIR IN	126.12	DEG.	F
C	19	GEN. AIR OUT	159.39	DEG.	F
C	20	GEN. FRAME TOP	156.90	DEG.	F
C	21	GEN. FRAME BTM	137.39	DEG.	F
C	22	GEN. EXCITER	-10.635	DEG.	F
C	23	GEN. VOLT. REG.	130.79	DEG.	F
C	24	CONTROL PANEL	136.16	DEG.	F
C	25	RELAY AREA	137.44	DEG.	F
C	26	BATTERY LEFT		OPEN	TC
C	27	BATTERY RIGHT		OPEN	TC
C	28	AIR IN SET	125.55	DEG.	F
C	29	FUEL TANK	14.079	DEG.	F
C	30	FUEL OUTLET	146.95	DEG.	F

BEGIN SCAN GROUP 1 04 FEB 88 12:01:05
 50 NW 400 Hz GEN SET 5-N R27 0003

C	1	EXHAUST 1	831.55	DEG.	F
C	2	EXHAUST 2	686.18	DEG.	F
C	3	EXHAUST 3	817.78	DEG.	F
C	4	EXHAUST 4	987.21	DEG.	F
C	5	ENG. COOL. IN	211.85	DEG.	F
C	6	ENG. COOL. OUT	221.64	DEG.	F
C	7	OIL SUMP	242.55	DEG.	F
C	10	OIL GALLERY	243.36	DEG.	F
C	13	ENG. INTAKE	138.38	DEG.	F
C	14	RAD. TOP LEFT	162.48	DEG.	F
C	15	RAD. BTM LEFT	158.07	DEG.	F
C	16	RAD. TOP RIGHT	155.07	DEG.	F
C	17	RAD. BTM RIGHT	160.78	DEG.	F
C	18	GEN. AIR IN	125.44	DEG.	F
C	19	GEN. AIR OUT	158.97	DEG.	F
C	20	GEN. FRAME TOP	156.78	DEG.	F
C	21	GEN. FRAME BTM	136.64	DEG.	F
C	22	GEN. EXCITER	148.79	DEG.	F
C	23	GEN. VOLT. REG.	132.36	DEG.	F
C	24	CONTROL PANEL	136.31	DEG.	F
C	25	RELAY AREA	137.73	DEG.	F
C	26	BATTERY LEFT		OPEN TC	
C	27	BATTERY RIGHT		OPEN TC	
C	28	AIR IN SET	126.41	DEG.	F
C	29	FUEL TANK	75.474	DEG.	F
C	30	FUEL OUTLET	146.89	DEG.	F

END SCAN GROUP 1 04 FEB 88 12:01:14

STOPPED SINGLE SCAN 04 FEB 88 12:01:14

MS

30 / SHEET

JOB NO. 555-2140

PROJ. ENCR.

RECORDED/OBSERVER 31 km/c

**Testing Division
P.O. Box 38
Hazelwood, Virginia 22471
Tel: 703 752 5300**

12/13 01/00

CLIENT INTERVIEW:
(Sister Client)

STEP NO.	LOAD STEP	VOLTAGE			AMPERES			KILOWATTS			EC1570 POWER FACTOR	EC0920 FREQ.	EC0920 EXCITER FIELD	AMB. TEMP.	PRESS. IN WATER	
		L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC MTS	L2-L0 AC MTS	L3-L0 AC MTS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw						
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	132
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	127	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56	2.56	2.49	.25	.25	.50	400.5	15.5	5.1	125	136
1435	R/L	APPLIED 120	120	120	2.56	2.56										

Shaw Circuit

BEGIN SCAN GROUP 1 04 FEB 88 14:12:56
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	141.98	DEG.	F
C	2	EXHAUST 2	141.44	DEG.	F
C	3	EXHAUST 3	141.59	DEG.	F
C	4	EXHAUST 4	141.64	DEG.	F
C	7	ENG. COOL. IN	119.95	DEG.	F
C	8	ENG. COOL. OUT	148.02	DEG.	F
C	9	OIL SUMP	147.38	DEG.	F
C	10	OIL GALLERY	139.22	DEG.	F
C	13	ENG. INTAKE	129.28	DEG.	F
C	14	RAD. TOP LEFT	134.44	DEG.	F
C	15	RAD. BTM LEFT	128.21	DEG.	F
C	16	RAD. TOP RIGHT	135.55	DEG.	F
C	17	RAD. BTM RIGHT	121.53	DEG.	F
C	18	GEN. AIR IN	128.98	DEG.	F
C	19	GEN. AIR OUT	113.63	DEG.	F
C	20	GEN. FRAME TOP	148.18	DEG.	F
C	21	GEN. FRAME BTM	133.95	DEG.	F
C	22	GEN. EXCITER	138.99	DEG.	F
C	23	GEN. VOLT. REG.	138.24	DEG.	F
C	24	CONTROL PANEL	127.74	DEG.	F
C	25	RELAY AREA	129.37	DEG.	F
C	27	BATTERY RIGHT	111.79	DEG.	F
C	28	AIR IN SET	128.18	DEG.	F
C	29	FUEL TANK	94.109	DEG.	F
C	30	FUEL OUTLET	118.27	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:13:04

STOPPED SINGLE SCAN 04 FEB 88 14:13:04

BEGIN SCAN GROUP 0 04 FEB 88 14:28:29
GO

C	0		.00000		
C	1	EXHAUST 1	888.38	DEG.	F
C	2	EXHAUST 2	645.89	DEG.	F
C	3	EXHAUST 3	798.85	DEG.	F
C	4	EXHAUST 4	869.22	DEG.	F
C	5	EXHAUST 5	853.97	DEG.	F
C	6	EXHAUST 6	762.53	DEG.	F
C	7	ENG. COOL. IN	191.31	DEG.	F
C	8	ENG. COOL. OUT	198.58	DEG.	F
C	9	OIL SUMP	182.66	DEG.	F
C	10	OIL GALLERY	185.35	DEG.	F
C	11	OIL COOLER IN		OPEN TO	
C	12	OIL COOLER OUT		OPEN TO	
C	13	ENG. INTAKE	129.49	DEG.	F
C	14	RAD. TOP LEFT	148.18	DEG.	F
C	15	RAD. BTM LEFT	144.73	DEG.	F
C	16	RAD. TOP RIGHT	144.23	DEG.	F
C	17	RAD. BTM RIGHT	146.36	DEG.	F
C	18	GEN. AIR IN	125.80	DEG.	F
C	19	GEN. AIR OUT	158.44	DEG.	F
C	20	GEN. FRAME TOP	145.81	DEG.	F
C	21	GEN. FRAME BTM	131.86	DEG.	F
C	22	GEN. EXCITER	131.96	DEG.	F
C	23	GEN. VOLT. REG.	129.58	DEG.	F
C	24	CONTROL PANEL	127.14	DEG.	F
C	25	RELAY AREA	129.89	DEG.	F
C	26	BATTERY LEFT		OPEN TO	
C	27	BATTERY RIGHT	120.84	DEG.	F
C	28	AIR IN SET	125.21	DEG.	F
C	29	FUEL TANK	95.938	DEG.	F
C	30	FUEL OUTLET	134.52	DEG.	F

BEGIN SCAN GROUP 1 04 FEB 88 14:32:16
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	572.68	DEG.	F
C	2	EXHAUST 2	488.36	DEG.	F
C	3	EXHAUST 3	598.92	DEG.	F
C	4	EXHAUST 4	615.98	DEG.	F
C	7	ENG. COOL. IN	187.59	DEG.	F
C	8	ENG. COOL. OUT	193.68	DEG.	F
C	9	OIL SUMP	199.88	DEG.	F
C	10	OIL GALLERY	282.80	DEG.	F
C	13	ENG. INTAKE	132.48	DEG.	F
C	14	RAD. TOP LEFT	148.65	DEG.	F
C	15	RAD. BTM LEFT	148.12	DEG.	F
C	16	RAD. TOP RIGHT	145.89	DEG.	F
C	17	RAD. BTM RIGHT	149.63	DEG.	F
C	18	GEN. AIR IN	125.51	DEG.	F
C	19	GEN. AIR OUT	153.76	DEG.	F
C	20	GEN. FRAME TOP	158.16	DEG.	F
C	21	GEN. FRAME BTM	134.95	DEG.	F
C	22	GEN. EXCITER	137.47	DEG.	F
C	23	GEN. VOLT. REG.	129.68	DEG.	F
C	24	CONTROL PANEL	129.74	DEG.	F
C	25	RELAY AREA	132.61	DEG.	F
C	27	BATTERY RIGHT	122.64	DEG.	F
C	28	AIR IN SET	127.63	DEG.	F
C	29	FUEL TANK	97.376	DEG.	F
C	30	FUEL OUTLET	148.68	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:32:25

STOPPED SINGLE SCAN 04 FEB 88 14:32:25

BEGIN SCAN GROUP 1 04 FEB 88 14:35:18
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	788.14	DEG.	F
C	2	EXHAUST 2	538.51	DEG.	F
C	3	EXHAUST 3	676.38	DEG.	F
C	4	EXHAUST 4	758.89	DEG.	F
C	7	ENG. COOL. IN	187.39	DEG.	F
C	8	ENG. COOL. OUT	193.59	DEG.	F
C	9	OIL SUMP	287.87	DEG.	F
C	10	OIL GALLERY	218.82	DEG.	F
C	13	ENG. INTAKE	133.58	DEG.	F
C	14	RAD. TOP LEFT	148.78	DEG.	F
C	15	RAD. BTM LEFT	148.28	DEG.	F
C	16	RAD. TOP RIGHT	146.59	DEG.	F
C	17	RAD. BTM RIGHT	158.64	DEG.	F
C	18	GEN. AIR IN	125.33	DEG.	F
C	19	GEN. AIR OUT	155.81	DEG.	F
C	20	GEN. FRAME TOP	152.69	DEG.	F
C	21	GEN. FRAME BTM	135.93	DEG.	F
C	22	GEN. EXCITER	136.87	DEG.	F
C	23	GEN. VOLT. REG.	138.74	DEG.	F
C	24	CONTROL PANEL	131.43	DEG.	F
C	25	RELAY AREA	133.85	DEG.	F
C	27	BATTERY RIGHT	124.78	DEG.	F
C	28	AIR IN SET	125.19	DEG.	F
C	29	FUEL TANK	98.518	DEG.	F
C	30	FUEL OUTLET	143.53	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:35:27

STOPPED SINGLE SCAN 04 FEB 88 14:35:27

BEGIN SCAN GROUP 1 04 FEB 88 14:49:03
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	563.15	DEG.	F
C	2	EXHAUST 2	465.67	DEG.	F
C	3	EXHAUST 3	572.65	DEG.	F
C	4	EXHAUST 4	593.35	DEG.	F
C	7	ENG. COOL. IN	187.54	DEG.	F
C	8	ENG. COOL. OUT	193.29	DEG.	F
C	9	OIL SUMP	222.32	DEG.	F
C	10	OIL GALLERY	222.83	DEG.	F
C	13	ENG. INTAKE	132.63	DEG.	F
C	14	RAD. TOP LEFT	148.71	DEG.	F
C	15	RAD. BTM LEFT	147.21	DEG.	F
C	16	RAD. TOP RIGHT	148.31	DEG.	F
C	17	RAD. BTM RIGHT	151.17	DEG.	F
C	18	GEN. AIR IN	127.72	DEG.	F
C	19	GEN. AIR OUT	158.32	DEG.	F
C	20	GEN. FRAME TOP	153.98	DEG.	F
C	21	GEN. FRAME BTM	136.18	DEG.	F
C	22	GEN. EXCITER	137.68	DEG.	F
C	23	GEN. VOLT. REG.	134.21	DEG.	F
C	24	CONTROL PANEL	134.63	DEG.	F
C	25	RELAY AREA	132.49	DEG.	F
C	27	BATTERY RIGHT	129.19	DEG.	F
C	28	AIR IN SET	127.93	DEG.	F
C	29	FUEL TANK	98.898	DEG.	F
C	30	FUEL OUTLET	147.27	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:49:12

STOPPED SINGLE SCAN 04 FEB 88 14:49:12

BEGIN SCAN GROUP 1 04 FEB 88 14:54:43
30 KW/400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	538.31	DEG.	F
C	2	EXHAUST 2	445.94	DEG.	F
C	3	EXHAUST 3	569.27	DEG.	F
C	4	EXHAUST 4	623.31	DEG.	F
C	7	ENG. COOL. IN	184.89	DEG.	F
C	8	ENG. COOL. OUT	189.69	DEG.	F
C	9	OIL SUMP	224.81	DEG.	F
C	10	OIL GALLERY	225.76	DEG.	F
C	13	ENG. INTAKE	133.49	DEG.	F
C	14	RAD. TOP LEFT	147.84	DEG.	F
C	15	RAD. BTM LEFT	147.01	DEG.	F
C	16	RAD. TOP RIGHT	148.13	DEG.	F
C	17	RAD. BTM RIGHT	151.51	DEG.	F
C	18	GEN. AIR IN	127.83	DEG.	F
C	19	GEN. AIR OUT	158.94	DEG.	F
C	20	GEN. FRAME TOP	155.33	DEG.	F
C	21	GEN. FRAME BTM	137.87	DEG.	F
C	22	GEN. EXCITER	138.95	DEG.	F
C	23	GEN. VOLT. REG.	134.87	DEG.	F
C	24	CONTROL PANEL	135.91	DEG.	F
C	25	RELAY AREA	132.74	DEG.	F
C	27	BATTERY RIGHT	131.11	DEG.	F
C	28	AIR IN SET	127.35	DEG.	F
C	29	FUEL TANK	100.88	DEG.	F
C	30	FUEL OUTLET	151.34	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:54:51

STOPPED SINGLE SCAN 04 FEB 88 14:54:51

BEGIN SCAN GROUP 1 04 FEB 88 14:39:15
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	569.10	DEG.	F
C	2	EXHAUST 2	454.53	DEG.	F
C	3	EXHAUST 3	569.81	DEG.	F
C	4	EXHAUST 4	604.03	DEG.	F
C	7	ENG. COOL. IN	184.68	DEG.	F
C	8	ENG. COOL. OUT	191.09	DEG.	F
C	9	OIL SUMP	214.18	DEG.	F
C	10	OIL GALLERY	217.99	DEG.	F
C	13	ENG. INTAKE	131.81	DEG.	F
C	14	RAD. TOP LEFT	146.01	DEG.	F
C	15	RAD. BTM LEFT	146.25	DEG.	F
C	16	RAD. TOP RIGHT	144.39	DEG.	F
C	17	RAD. BTM RIGHT	149.09	DEG.	F
C	18	GEN. AIR IN	122.93	DEG.	F
C	19	GEN. AIR OUT	156.18	DEG.	F
C	20	GEN. FRAME TOP	153.28	DEG.	F
C	21	GEN. FRAME BTM	135.47	DEG.	F
C	22	GEN. EXCITER	136.53	DEG.	F
C	23	GEN. VOLT. REG.	131.64	DEG.	F
C	24	CONTROL PANEL	132.98	DEG.	F
C	25	RELAY AREA	130.82	DEG.	F
C	27	BATTERY RIGHT	126.93	DEG.	F
C	28	AIR IN SET	124.53	DEG.	F
C	29	FUEL TANK	99.068	DEG.	F
C	30	FUEL OUTLET	145.54	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:39:23

STOPPED SINGLE SCAN 04 FEB 88 14:39:23

BEGIN SCAN GROUP 1 04 FEB 88 14:46:20
30 KW/400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	613.96	DEG.	F
C	2	EXHAUST 2	452.53	DEG.	F
C	3	EXHAUST 3	584.90	DEG.	F
C	4	EXHAUST 4	651.22	DEG.	F
C	7	ENG. COOL. IN	188.37	DEG.	F
C	8	ENG. COOL. OUT	186.55	DEG.	F
C	9	OIL SUMP	228.20	DEG.	F
C	10	OIL GALLERY	228.64	DEG.	F
C	13	ENG. INTAKE	138.24	DEG.	F
C	14	RAD. TOP LEFT	143.94	DEG.	F
C	15	RAD. BTM LEFT	142.69	DEG.	F
C	16	RAD. TOP RIGHT	144.39	DEG.	F
C	17	RAD. BTM RIGHT	147.31	DEG.	F
C	18	GEN. AIR IN	122.38	DEG.	F
C	19	GEN. AIR OUT	155.26	DEG.	F
C	20	GEN. FRAME TOP	152.23	DEG.	F
C	21	GEN. FRAME BTM	133.50	DEG.	F
C	22	GEN. EXCITER	135.73	DEG.	F
C	23	GEN. VOLT. REG.	134.06	DEG.	F
C	24	CONTROL PANEL	134.18	DEG.	F
C	25	RELAY AREA	128.69	DEG.	F
C	27	BATTERY RIGHT	128.50	DEG.	F
C	28	AIR IN SET	122.81	DEG.	F
C	29	FUEL TANK	98.384	DEG.	F
C	30	FUEL OUTLET	148.11	DEG.	F

END SCAN GROUP 1 04 FEB 88 14:46:28

STOPPED SINGLE SCAN 04 FEB 88 14:46:28

TEST DATA

ITEM 30 KW / 400 Hz

GEN SET

MODIFIED

REC'D. LIBBY WELDON

MODEL NO. MEP 1144

NAS

National
Technical
Systems

Scientific
Services
Group

Testing Division
PO Box 30
Harrison, Virginia 22471
Tel: 703 752 5300

REF. NO. MIL-STD 705

SHEET 1 OF 2

DATE 4 FEB 1958

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER

METHOD 512.3

CIRCUIT INTERRUPTER
(OVER VOLTAGE)

SERIAL NO. RZ 70003

1

2

STEP NO.	LOAD STEP	E60780 VOLTAGE	E60240 VOLTAGE	E60420 AMPERES	E60520 KILOWATTS	E62520 POWER FACTOR	E60780 FREQ.	E61620 VOLTAGE	E62520 AMPS	AMB. TEMP.	Press
		L1-L0 VAC	L2-L0 VAC	L1-L0 AC RMS	L2-L0 AC RMS	L1-L0 KW	L2-L0 KW	L3-L0 KW	VOLTS	TEMP.	IN/NO
15326		START UNIT	UNIT							121	
15327		156	120								
15328		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5	REDO STEP			
15329		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5			123	
15330		156	120								
15331		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			123	
15332		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15333		156	120							124	
15334		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			123	
15335		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15336		156	120							123	
15337		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15338		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15339		156	120							124	
15340		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15341		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15342		156	120								
15343		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5				
15344		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5			124	
15345		156	120								
15346		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15347		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15348		156	120								
15349		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15350		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15351		156	120								
15352		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15353		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15354		156	120								
15355		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15356		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15357		156	120								
15358		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15359		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15360		156	120								
15361		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15362		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15363		156	120								
15364		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15365		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15366		156	120								
15367		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15368		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15369		156	120								
15370		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15371		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15372		156	120								
15373		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15374		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15375		156	120								
15376		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15377		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15378		156	120								
15379		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15380		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15381		156	120								
15382		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15383		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15384		156	120								
15385		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15386		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15387		156	120								
15388		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15389		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15390		156	120								
15391		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15392		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15393		156	120								
15394		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15395		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15396		156	120								
15397		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15398		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15399		156	120								
15400		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15401		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15402		156	120								
15403		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15404		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15405		156	120								
15406		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15407		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15408		156	120								
15409		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			124	
15410		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				
15411		156	120								
15412		APPLIED OVER VOLTAGE	UNIT	SHUT DOWN	INDICATOR LIGHT ON	ON	400.5			125	
15413		RESET UNIT	UNIT	CIRCUIT BREAKER	RESET		400.5				

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IFCR. LIAISON WEEK

MODEL NO. MEP 114A

SERIAL NO. RE7 0003

**National
Technical
Systems**
Mar 10 1973

**Scientific
Services
Group**

**Testing Division
P.O. Box 38
Harwood, Virginia 22471
Tel: 703 752 5300**
117 3

Net 760 5/2.3

CURRENT INTERVIEWER
AREA + NUMBER DATE

REF. NO. MIL-STD 705

SHEET 2 OF 2

DATE 305/8-27/3

JOB NO. 555-2140

PROJ. ENGR.

RECORDER/OBSERVER BJ/KM/PC

STEP NO.	LOAD STEP	E60700 VOLTAGE #2				E60920 AMPERES x40				E62530 KILOWATTS x40				E62500 POWER		E60960 FREQ.		E60670 EXCITER FIELD		E62500	
		V1- VAC	V2- VAC	V3- VAC	V4- VAC	A1- AC AMPS	A2- AC AMPS	A3- AC AMPS	A4- AC AMPS	K1- KW	K2- KW	K3- KW	K4- KW	WATT	FACTOR	Hz	VDC	AMPS	TEMP. °F	Recess	
120					73											400.5		126			
		APPLIED UNDER VOLTAGE																			
		RESET CIRCUIT BREAKER																			
120					73											400.5		126			
		APPLIED UNDER VOLTAGE																			
		RESET CIRCUIT BREAKER																			
120					99											400.5		127			
120					99											400.5		125			
		APPLIED UNDER VOLTAGE																			
		RESET CIRCUIT BREAKER																			
120					99											400.6		123			
		APPLIED UNDER VOLTAGE																			
		RESET CIRCUIT BREAKER																			
120					99											400.6		122			
		APPLIED UNDER VOLTAGE																			
		RESET CIRCUIT BREAKER																			
		END OF TEST																			

Over/under tolerance Measurement

BEGIN SCAN GROUP 1 04 FEB 88 15:37:46
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	404.02	DEG.	F
C	2	EXHAUST 2	324.05	DEG.	F
C	3	EXHAUST 3	378.45	DEG.	F
C	4	EXHAUST 4	407.84	DEG.	F
C	7	ENG. COOL. IN	178.99	DEG.	F
C	8	ENG. COOL. OUT	188.63	DEG.	F
C	9	OIL SUMP	194.79	DEG.	F
C	10	OIL GALLERY	197.87	DEG.	F
C	13	ENG. INTAKE	137.98	DEG.	F
C	14	RAD. TOP LEFT	139.33	DEG.	F
C	15	RAD. BTM LEFT	148.26	DEG.	F
C	16	RAD. TOP RIGHT	142.16	DEG.	F
C	17	RAD. BTM RIGHT	143.46	DEG.	F
C	18	GEN. AIR IN	121.57	DEG.	F
C	19	GEN. AIR OUT	153.36	DEG.	F
C	20	GEN. FRAME TOP	156.14	DEG.	F
C	21	GEN. FRAME BTM	141.13	DEG.	F
C	22	GEN. EXCITER	135.85	DEG.	F
C	23	GEN. VOLT. REG.	135.97	DEG.	F
C	24	CONTROL PANEL	134.69	DEG.	F
C	25	RELAY AREA	128.99	DEG.	F
C	27	BATTERY RIGHT	125.19	DEG.	F
C	28	AIR IN SET	121.52	DEG.	F
C	29	FUEL TANK	185.38	DEG.	F
C	30	FUEL OUTLET	148.64	DEG.	F

END SCAN GROUP 1 04 FEB 88 15:37:55

STOPPED SINGLE SCAN 04 FEB 88 15:37:55

BEGIN SCAN GROUP 1 04 FEB 88 15:40:41
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	398.38	DEG.	F
C	2	EXHAUST 2	326.74	DEG.	F
C	3	EXHAUST 3	377.94	DEG.	F
C	4	EXHAUST 4	486.39	DEG.	F
C	7	ENG. COOL. IN	174.67	DEG.	F
C	8	ENG. COOL. OUT	182.21	DEG.	F
C	9	OIL SUMP	195.99	DEG.	F
C	10	OIL GALLERY	198.49	DEG.	F
C	13	ENG. INTAKE	134.64	DEG.	F
C	14	RAD. TOP LEFT	148.36	DEG.	F
C	15	RAD. BTM LEFT	141.36	DEG.	F
C	16	RAD. TOP RIGHT	141.85	DEG.	F
C	17	RAD. BTM RIGHT	144.88	DEG.	F
C	18	GEN. AIR IN	122.69	DEG.	F
C	19	GEN. AIR OUT	154.42	DEG.	F
C	20	GEN. FRAME TOP	155.69	DEG.	F
C	21	GEN. FRAME BTM	139.14	DEG.	F
C	22	GEN. EXCITER	135.87	DEG.	F
C	23	GEN. VOLT. REG.	135.33	DEG.	F
C	24	CONTROL PANEL	134.27	DEG.	F
C	25	RELAY AREA	129.57	DEG.	F
C	27	BATTERY RIGHT	126.84	DEG.	F
C	28	AIR IN SET	123.25	DEG.	F
C	29	FUEL TANK	185.58	DEG.	F
C	30	FUEL OUTLET	148.92	DEG.	F

END SCAN GROUP 1 04 FEB 88 15:40:50

STOPPED SINGLE SCAN 04 FEB 88 15:40:50

BEGIN SCAN GROUP 1 04 FEB 88 15:41:57
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	403.36	DEG.	F
C	2	EXHAUST 2	324.77	DEG.	F
C	3	EXHAUST 3	386.13	DEG.	F
C	4	EXHAUST 4	488.42	DEG.	F
C	7	ENG. COOL. IN	174.46	DEG.	F
C	8	ENG. COOL. OUT	182.45	DEG.	F
C	9	OIL SUMP	197.84	DEG.	F
C	10	OIL GALLERY	200.83	DEG.	F
C	13	ENG. INTAKE	132.42	DEG.	F
C	14	RAD. TOP LEFT	139.96	DEG.	F
C	15	RAD. BTM LEFT	148.12	DEG.	F
C	16	RAD. TOP RIGHT	141.71	DEG.	F
C	17	RAD. BTM RIGHT	143.58	DEG.	F
C	18	GEN. AIR IN	123.41	DEG.	F
C	19	GEN. AIR OUT	154.38	DEG.	F
C	20	GEN. FRAME TOP	153.58	DEG.	F
C	21	GEN. FRAME BTM	138.15	DEG.	F
C	22	GEN. EXCITER	136.53	DEG.	F
C	23	GEN. VOLT. REG.	134.99	DEG.	F
C	24	CONTROL PANEL	134.80	DEG.	F
C	25	RELAY AREA	128.83	DEG.	F
C	27	BATTERY RIGHT	127.15	DEG.	F
C	28	AIR IN SET	123.31	DEG.	F
C	29	FUEL TANK	185.78	DEG.	F
C	30	FUEL OUTLET	149.22	DEG.	F

END SCAN GROUP 1 04 FEB 88 15:42:05

STOPPED SINGLE SCAN 04 FEB 88 15:42:05

BEGIN SCAN GROUP 1 04 FEB 88 15:42:55
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	404.48	DEG.	F
C	2	EXHAUST 2	336.61	DEG.	F
C	3	EXHAUST 3	386.85	DEG.	F
C	4	EXHAUST 4	414.73	DEG.	F
C	7	ENG. COOL. IN	175.58	DEG.	F
C	8	ENG. COOL. OUT	183.34	DEG.	F
C	9	OIL SUMP	199.15	DEG.	F
C	10	OIL GALLERY	201.33	DEG.	F
C	13	ENG. INTAKE	131.91	DEG.	F
C	14	RAD. TOP LEFT	148.58	DEG.	F
C	15	RAD. BTM LEFT	148.89	DEG.	F
C	16	RAD. TOP RIGHT	141.82	DEG.	F
C	17	RAD. BTM RIGHT	144.88	DEG.	F
C	18	GEN. AIR IN	123.92	DEG.	F
C	19	GEN. AIR OUT	154.97	DEG.	F
C	20	GEN. FRAME TOP	153.95	DEG.	F
C	21	GEN. FRAME BTM	137.79	DEG.	F
C	22	GEN. EXCITER	135.74	DEG.	F
C	23	GEN. VOLT. REG.	135.87	DEG.	F
C	24	CONTROL PANEL	133.98	DEG.	F
C	25	RELAY AREA	129.85	DEG.	F
C	27	BATTERY RIGHT	127.28	DEG.	F
C	28	AIR IN SET	124.25	DEG.	F
C	29	FUEL TANK	185.91	DEG.	F
C	30	FUEL OUTLET	149.22	DEG.	F

END SCAN GROUP 1 04 FEB 88 15:43:04

STOPPED SINGLE SCAN 04 FEB 88 15:43:04

BEGIN SCAN GROUP 1 04 FEB 88 16:09:04
30 KW 400 HZ GEN SET S/N R27 0003

C 1	EXHAUST 1	397.51	DEG. F
C 2	EXHAUST 2	313.80	DEG. F
C 3	EXHAUST 3	366.66	DEG. F
C 4	EXHAUST 4	399.01	DEG. F
C 7	ENG. COOL. IN	167.49	DEG. F
C 8	ENG. COOL. OUT	177.27	DEG. F
C 9	OIL SUMP	186.72	DEG. F
C 10	OIL GALLERY	189.47	DEG. F
C 13	ENG. INTAKE	135.00	DEG. F
C 14	RAD. TOP LEFT	138.51	DEG. F
C 15	RAD. BTM LEFT	138.99	DEG. F
C 16	RAD. TOP RIGHT	142.11	DEG. F
C 17	RAD. BTM RIGHT	166.51	DEG. F
C 18	GEN. AIR IN	122.01	DEG. F
C 19	GEN. AIR OUT	151.05	DEG. F
C 20	GEN. FRAME TOP	154.06	DEG. F
C 21	GEN. FRAME BTM	141.71	DEG. F
C 22	GEN. EXCITER	132.05	DEG. F
C 23	GEN. VOLT. REG.	130.48	DEG. F
C 24	CONTROL PANEL	129.14	DEG. F
C 25	RELAY AREA	126.92	DEG. F
C 27	BATTERY RIGHT	124.38	DEG. F
C 28	AIR IN SET	123.23	DEG. F
C 29	FUEL TANK	107.24	DEG. F
C 30	FUEL OUTLET	143.57	DEG. F

END SCAN GROUP 1 04 FEB 88 16:09:13

STOPPED SINGLE SCAN 04 FEB 88 16:09:13

BEGIN SCAN GROUP 1 04 FEB 88 16:10:29
30 KW 400 HZ GEN SET S/N R27 0003

C 1	EXHAUST 1	401.43	DEG. F
C 2	EXHAUST 2	329.40	DEG. F
C 3	EXHAUST 3	379.18	DEG. F
C 4	EXHAUST 4	407.21	DEG. F
C 7	ENG. COOL. IN	178.44	DEG. F
C 8	ENG. COOL. OUT	186.42	DEG. F
C 9	OIL SUMP	190.46	DEG. F
C 10	OIL GALLERY	193.63	DEG. F
C 13	ENG. INTAKE	131.94	DEG. F
C 14	RAD. TOP LEFT	139.27	DEG. F
C 15	RAD. BTM LEFT	138.68	DEG. F
C 16	RAD. TOP RIGHT	141.69	DEG. F
C 17	RAD. BTM RIGHT	OPEN TC	
C 18	GEN. AIR IN	123.12	DEG. F
C 19	GEN. AIR OUT	151.63	DEG. F
C 20	GEN. FRAME TOP	151.96	DEG. F
C 21	GEN. FRAME BTM	139.43	DEG. F
C 22	GEN. EXCITER	133.32	DEG. F
C 23	GEN. VOLT. REG.	130.43	DEG. F
C 24	CONTROL PANEL	129.34	DEG. F
C 25	RELAY AREA	127.71	DEG. F
C 27	BATTERY RIGHT	126.02	DEG. F
C 28	AIR IN SET	123.95	DEG. F
C 29	FUEL TANK	107.27	DEG. F
C 30	FUEL OUTLET	144.94	DEG. F

END SCAN GROUP 1 04 FEB 88 16:10:38

STOPPED SINGLE SCAN 04 FEB 88 16:10:38

BEGIN SCAN GROUP 1 04 FEB 88 16:09:54
30 KW/400 HZ GEN SET S/N R27 0003

C 1	EXHAUST 1	401.19	DEG. F
C 2	EXHAUST 2	324.10	DEG. F
C 3	EXHAUST 3	375.18	DEG. F
C 4	EXHAUST 4	402.97	DEG. F
C 7	ENG. COOL. IN	169.30	DEG. F
C 8	ENG. COOL. OUT	179.38	DEG. F
C 9	OIL SUMP	189.07	DEG. F
C 10	OIL GALLERY	191.92	DEG. F
C 13	ENG. INTAKE	132.95	DEG. F
C 14	RAD. TOP LEFT	138.48	DEG. F
C 15	RAD. BTM LEFT	138.77	DEG. F
C 16	RAD. TOP RIGHT	142.02	DEG. F
C 17	RAD. BTM RIGHT	OPEN TC	
C 18	GEN. AIR IN	122.82	DEG. F
C 19	GEN. AIR OUT	151.45	DEG. F
C 20	GEN. FRAME TOP	152.61	DEG. F
C 21	GEN. FRAME BTM	140.16	DEG. F
C 22	GEN. EXCITER	133.14	DEG. F
C 23	GEN. VOLT. REG.	130.33	DEG. F
C 24	CONTROL PANEL	129.11	DEG. F
C 25	RELAY AREA	127.50	DEG. F
C 27	BATTERY RIGHT	125.41	DEG. F
C 28	AIR IN SET	123.65	DEG. F
C 29	FUEL TANK	107.19	DEG. F
C 30	FUEL OUTLET	144.63	DEG. F

END SCAN GROUP 1 04 FEB 88 16:10:03

STOPPED SINGLE SCAN 04 FEB 88 16:10:03

BEGIN SCAN GROUP 1 04 FEB 88 16:13:07
30 KW/400 HZ GEN SET S/N R27 0003

C 1	EXHAUST 1	400.97	DEG. F
C 2	EXHAUST 2	334.52	DEG. F
C 3	EXHAUST 3	383.41	DEG. F
C 4	EXHAUST 4	412.14	DEG. F
C 7	ENG. COOL. IN	173.29	DEG. F
C 8	ENG. COOL. OUT	182.03	DEG. F
C 9	OIL SUMP	194.01	DEG. F
C 10	OIL GALLERY	197.79	DEG. F
C 13	ENG. INTAKE	138.45	DEG. F
C 14	RAD. TOP LEFT	139.78	DEG. F
C 15	RAD. BTM LEFT	139.87	DEG. F
C 16	RAD. TOP RIGHT	141.22	DEG. F
C 17	RAD. BTM RIGHT	162.21	DEG. F
C 18	GEN. AIR IN	124.21	DEG. F
C 19	GEN. AIR OUT	153.21	DEG. F
C 20	GEN. FRAME TOP	151.27	DEG. F
C 21	GEN. FRAME BTM	137.00	DEG. F
C 22	GEN. EXCITER	134.10	DEG. F
C 23	GEN. VOLT. REG.	130.83	DEG. F
C 24	CONTROL PANEL	129.06	DEG. F
C 25	RELAY AREA	128.25	DEG. F
C 27	BATTERY RIGHT	127.74	DEG. F
C 28	AIR IN SET	125.08	DEG. F
C 29	FUEL TANK	107.78	DEG. F
C 30	FUEL OUTLET	145.74	DEG. F

END SCAN GROUP 1 04 FEB 88 16:13:15

STOPPED SINGLE SCAN 04 FEB 88 16:13:15

BEGIN SCAN GROUP 1 04 FEB 88 16:14:46
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	483.93	DEG.	F
C	2	EXHAUST 2	337.96	DEG.	F
C	3	EXHAUST 3	387.89	DEG.	F
C	4	EXHAUST 4	412.59	DEG.	F
C	7	ENG. COOL. IN	174.37	DEG.	F
C	8	ENG. COOL. OUT	182.79	DEG.	F
C	9	OIL SUMP	198.61	DEG.	F
C	10	OIL GALLERY	201.74	DEG.	F
C	13	ENG. INTAKE	129.99	DEG.	F
C	14	RAD. TOP LEFT	148.79	DEG.	F
C	15	RAD. BTM LEFT	148.44	DEG.	F
C	16	RAD. TOP RIGHT	141.75	DEG.	F
C	17	RAD. BTM RIGHT	144.81	DEG.	F
C	18	GEN. AIR IN	125.68	DEG.	F
C	19	GEN. AIR OUT	154.11	DEG.	F
C	20	GEN. FRAME TOP	158.87	DEG.	F
C	21	GEN. FRAME BTM	136.59	DEG.	F
C	22	GEN. EXCITER	135.55	DEG.	F
C	23	GEN. VOLT. REG.	138.85	DEG.	F
C	24	CONTROL PANEL	138.27	DEG.	F
C	25	RELAY AREA	128.91	DEG.	F
C	27	BATTERY RIGHT	128.42	DEG.	F
C	28	AIR IN SET	126.43	DEG.	F
C	29	FUEL TANK	188.87	DEG.	F
C	30	FUEL OUTLET	145.95	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:14:55

STOPPED SINGLE SCAN 04 FEB 88 16:14:55

BEGIN SCAN GROUP 1 04 FEB 88 16:15:29
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	484.85	DEG.	F
C	2	EXHAUST 2	339.87	DEG.	F
C	3	EXHAUST 3	388.26	DEG.	F
C	4	EXHAUST 4	414.72	DEG.	F
C	7	ENG. COOL. IN	175.88	DEG.	F
C	8	ENG. COOL. OUT	183.54	DEG.	F
C	9	OIL SUMP	199.98	DEG.	F
C	10	OIL GALLERY	203.12	DEG.	F
C	13	ENG. INTAKE	129.98	DEG.	F
C	14	RAD. TOP LEFT	141.16	DEG.	F
C	15	RAD. BTM LEFT	148.88	DEG.	F
C	16	RAD. TOP RIGHT	142.34	DEG.	F
C	17	RAD. BTM RIGHT		OPEN TC	
C	18	GEN. AIR IN	126.48	DEG.	F
C	19	GEN. AIR OUT	154.55	DEG.	F
C	20	GEN. FRAME TOP	158.85	DEG.	F
C	21	GEN. FRAME BTM	136.58	DEG.	F
C	22	GEN. EXCITER	135.83	DEG.	F
C	23	GEN. VOLT. REG.	131.23	DEG.	F
C	24	CONTROL PANEL	138.36	DEG.	F
C	25	RELAY AREA	129.18	DEG.	F
C	27	BATTERY RIGHT	128.36	DEG.	F
C	28	AIR IN SET	126.88	DEG.	F
C	29	FUEL TANK	188.29	DEG.	F
C	30	FUEL OUTLET	145.97	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:15:38

STOPPED SINGLE SCAN 04 FEB 88 16:15:38

BEGIN SCAN GROUP 1 04 FEB 88 16:17:10
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	483.69	DEG.	F
C	2	EXHAUST 2	339.95	DEG.	F
C	3	EXHAUST 3	388.21	DEG.	F
C	4	EXHAUST 4	418.98	DEG.	F
C	7	ENG. COOL. IN	175.94	DEG.	F
C	8	ENG. COOL. OUT	184.26	DEG.	F
C	9	OIL SUMP	203.24	DEG.	F
C	10	OIL GALLERY	206.45	DEG.	F
C	13	ENG. INTAKE	138.35	DEG.	F
C	14	RAD. TOP LEFT	142.89	DEG.	F
C	15	RAD. BTM LEFT	141.49	DEG.	F
C	16	RAD. TOP RIGHT	142.86	DEG.	F
C	17	RAD. BTM RIGHT		OPEN TC	
C	18	GEN. AIR IN	126.58	DEG.	F
C	19	GEN. AIR OUT	155.23	DEG.	F
C	20	GEN. FRAME TOP	151.18	DEG.	F
C	21	GEN. FRAME BTM	136.38	DEG.	F
C	22	GEN. EXCITER	137.88	DEG.	F
C	23	GEN. VOLT. REG.	131.46	DEG.	F
C	24	CONTROL PANEL	138.83	DEG.	F
C	25	RELAY AREA	129.88	DEG.	F
C	27	BATTERY RIGHT	129.12	DEG.	F
C	28	AIR IN SET	127.72	DEG.	F
C	29	FUEL TANK	188.58	DEG.	F
C	30	FUEL OUTLET	146.68	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:17:18

STOPPED SINGLE SCAN 04 FEB 88 16:17:18

BEGIN SCAN GROUP 1 04 FEB 88 16:18:06
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	482.41	DEG.	F
C	2	EXHAUST 2	339.67	DEG.	F
C	3	EXHAUST 3	393.66	DEG.	F
C	4	EXHAUST 4	421.29	DEG.	F
C	7	ENG. COOL. IN	176.48	DEG.	F
C	8	ENG. COOL. OUT	184.86	DEG.	F
C	9	OIL SUMP	204.83	DEG.	F
C	10	OIL GALLERY	207.88	DEG.	F
C	13	ENG. INTAKE	138.72	DEG.	F
C	14	RAD. TOP LEFT	142.38	DEG.	F
C	15	RAD. BTM LEFT	141.78	DEG.	F
C	16	RAD. TOP RIGHT	142.72	DEG.	F
C	17	RAD. BTM RIGHT	145.37	DEG.	F
C	18	GEN. AIR IN	126.88	DEG.	F
C	19	GEN. AIR OUT	155.46	DEG.	F
C	20	GEN. FRAME TOP	151.51	DEG.	F
C	21	GEN. FRAME BTM	136.57	DEG.	F
C	22	GEN. EXCITER	137.26	DEG.	F
C	23	GEN. VOLT. REG.	131.63	DEG.	F
C	24	CONTROL PANEL	131.22	DEG.	F
C	25	RELAY AREA	138.32	DEG.	F
C	27	BATTERY RIGHT	129.25	DEG.	F
C	28	AIR IN SET	125.81	DEG.	F
C	29	FUEL TANK	188.69	DEG.	F
C	30	FUEL OUTLET	146.87	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:18:15

STOPPED SINGLE SCAN 04 FEB 88 16:18:15

BEGIN SCAN GROUP 1 04 FEB 88 16:18:57
30 KW 400 HZ GEN SET S/N RZ7 0003

C	1	EXHAUST 1	481.87	DEG.	F
C	2	EXHAUST 2	339.91	DEG.	F
C	3	EXHAUST 3	393.19	DEG.	F
C	4	EXHAUST 4	428.51	DEG.	F
C	7	ENG. COOL. IN	176.79	DEG.	F
C	8	ENG. COOL. OUT	184.92	DEG.	F
C	9	OIL SUMP	206.14	DEG.	F
C	10	OIL GALLERY	289.42	DEG.	F
C	13	ENG. INTAKE	138.34	DEG.	F
C	14	RAD. TOP LEFT	141.48	DEG.	F
C	15	RAD. BTM LEFT	141.52	DEG.	F
C	16	RAD. TOP RIGHT	142.31	DEG.	F
C	17	RAD. BTM RIGHT	156.73	DEG.	F
C	19	GEN. AIR IN	123.61	DEG.	F
C	19	GEN. AIR OUT	155.89	DEG.	F
C	20	GEN. FRAME TOP	151.42	DEG.	F
C	21	GEN. FRAME BTM	135.77	DEG.	F
C	22	GEN. EXCITER	137.22	DEG.	F
C	23	GEN. VOLT. REG.	131.34	DEG.	F
C	24	CONTROL PANEL	131.58	DEG.	F
C	25	RELAY AREA	129.42	DEG.	F
C	27	BATTERY RIGHT	129.56	DEG.	F
C	28	AIR IN SET	123.44	DEG.	F
C	29	FUEL TANK	188.67	DEG.	F
C	30	FUEL OUTLET	147.28	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:19:06

STOPPED SINGLE SCAN 04 FEB 88 16:19:06

BEGIN SCAN GROUP 1 04 FEB 88 16:19:38
30 KW 400 HZ GEN SET S/N RZ7 0003

C	1	EXHAUST 1	483.88	DEG.	F
C	2	EXHAUST 2	348.27	DEG.	F
C	3	EXHAUST 3	394.89	DEG.	F
C	4	EXHAUST 4	428.11	DEG.	F
C	7	ENG. COOL. IN	176.66	DEG.	F
C	8	ENG. COOL. OUT	185.28	DEG.	F
C	9	OIL SUMP	207.18	DEG.	F
C	10	OIL GALLERY	218.15	DEG.	F
C	13	ENG. INTAKE	129.93	DEG.	F
C	14	RAD. TOP LEFT	141.38	DEG.	F
C	15	RAD. BTM LEFT	141.19	DEG.	F
C	16	RAD. TOP RIGHT	142.83	DEG.	F
C	17	RAD. BTM RIGHT	168.88	DEG.	F
C	19	GEN. AIR IN	122.66	DEG.	F
C	19	GEN. AIR OUT	154.88	DEG.	F
C	20	GEN. FRAME TOP	151.28	DEG.	F
C	21	GEN. FRAME BTM	135.12	DEG.	F
C	22	GEN. EXCITER	137.82	DEG.	F
C	23	GEN. VOLT. REG.	131.66	DEG.	F
C	24	CONTROL PANEL	131.88	DEG.	F
C	25	RELAY AREA	128.81	DEG.	F
C	27	BATTERY RIGHT	129.65	DEG.	F
C	28	AIR IN SET	122.76	DEG.	F
C	29	FUEL TANK	188.98	DEG.	F
C	30	FUEL OUTLET	147.83	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:19:47

STOPPED SINGLE SCAN 04 FEB 88 16:19:47

TEST DATA

MS

ITEM 3010 400 Hz
 GENERATOR SET
 MANUFACTURE
 MFG. LLOYD W. FOWLER
 MODEL NO. 140 1144
 SERIAL NO. 27 0003

REF. NO. MIL-STD 705; 513.2
 SHEET 1 OF 1
 DATE 4 FEB 1988
 JOB NO. 555-2140
 PROJ. ENGR.
 RECORDER/OBSERVER BJ

National Technical Systems
 Scientific Services Group
 Testing Division
 PO Box 38
 Harwood, Virginia 22471
 Tel: 703 752 5300

INDICATING INSTRUMENT TEST (ELECTRICAL)

PANEL, INSTRUMENTS

INST. NO.	STEP NO.	LOAD STEP	VOLTAGE			% AMPERES			KILOWATTS			POWER FACTOR	FREQ. Hz	Z LOAD			AMB. TEMP °F
			L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0	L1-L0	L2-L0	L3-L0			L1-L0	L2-L0	L3-L0	
			VAC	VAC	VAC	AC AMPS	AC AMPS	AC AMPS	Kw	Kw	Kw	PF					
			ZEROED	PHASE UNIT													
			STARTED UNIT														
163		N/2	120	121	121	0	0	0	N/A	N/A	N/A	N/A	400.0	0	0	0	121
164		N/2	120	121	120	0	0	0	N/A	N/A	N/A	N/A	388.0	0	0	0	122
165		N/2	120	120	120	0	0	0	N/A	N/A	N/A	N/A	412.0	0	0	0	125
166		N/4	120	120	120	22	22	23	N/A	N/A	N/A	N/A	400.0	22	22	22	126
167		N/4	120	120	120	46	46	47	N/A	N/A	N/A	N/A	400.0	45	45	45	128
168		N/4	120	120	120	77	78	79	N/A	N/A	N/A	N/A	400.0	77	77	77	123
169		N/4	120	120	120	103	103	105	N/A	N/A	N/A	N/A	400.0	105	105	105	126
170		END OF TEST															

UNL. 1 AMPS - VOLTMETER OUT OF SPEC AT 20.00 LOAD EXCEEDS VACUUM ERROR AS SHOWN IN SPEC AND 12.00V AS PER MEASUREMENT DOCUMENT, PARA. 3.16.2.1 FREQUENCY METER EXCEEDED MAX ALLOWABLE ERROR OF 0.1% AS PER MEASUREMENT DOCUMENT, PARA 3.16.2.4.5 (2)

NOTES:

TEST DATA

REF. NO. MIL-STD 705: 513.2

SHEET 1 OF 1

DATE 4 FEB 1988

JOB NO. 555-2160

PROJ. ENGR.

RECORDER/OBSERVER BJ KM, GC

NAS

National Scientific Testing Division
Technical Services PO Box 38
Systems Group Harwood, Virginia 22471
Tel: 703 752 5300

INDICATING INSTRUMENT TEST (ELECTRICAL)

MASTER INSTRUMENTS

ITEM 60 KW 400 Hz

Serial Ser

Model

MPGR. MAG. MECHANIC

MODEL NO. 1144

SERIAL NO. 70003

INST. TIME	LOAD STEP NO.	E60280 VOLTAGE			E60420 AMPERES			E62530 KILOWATTS X40			E62520 POWER FACTOR	E60960 FREQ. Hz	E61670 VOLTS VDC	E62700 EXCITER FIELD	E62700 AMPS	AMB. TEMP. °F	PRESS. IN/30W
		L1-L0 VAC	L2-L0 VAC	L3-L0 VAC	L1-L0 AC AMPS	L2-L0 AC AMPS	L3-L0 AC AMPS	L1-L0 Kw	L2-L0 Kw	L3-L0 Kw							
1643		ZERO PAUSE			METERS												
1646		START UNIT															
1649	N/L	119	119	119								401.9	9.9	3.3	120	13.5/22.5	
1642	N/L	118	118	118								390.5	10.5	3.5	123	13.4/22.3	
1648	N/L	118.5	118.5	118.5								413	9.3	3.1	126	15.0/24.0	
1653	1/4	117	117	117	.5	.5	.5	.061	.061	.061	.80	401.5	10.9	3.6	126	14.2/24.2	
1654	1/2	116.5	116.5	116.5	1.3	1.3	1.3	.125	.125	.125	.80	401.6	11.8	3.9	129	14.1/24.1	
1657	3/4	115	115	115	2.1	2.1	2.1	.187	.187	.187	.80	401.6	13.1	4.4	125	13.9/23.9	
1659	4/4	114.5	114.5	114.5	2.5	2.5	2.5	.248	.248	.248	.80	401.9	14.5	4.8	126	13.8/23.8	
1660		END OF TEST															



ITEM 30610 400 Hz
SERIAL NO. RZ 7-0003
MANUFACTURED BY
LIBBY WELAND
MODEL NO. MP 114

National Technical Systems
Scientific Services Group
Testing Division
PO Box 38
Hartwood, Virginia 22471
Tel: 703 752 5300

Panel Instrument Test
Method 513.2 (Computation Results)

REF. NO. MK-STD-705: 513.2
SHEET 1 OF 2
DATE 15 FEB 1988
JOB NO. 555-2140
PROJ. ENGR.
RECORDER/OBSERVER

TEST	VOLTS 11-10	% Error	VOLTS 12-10	% Error	VOLTS 13-10	% Error	AMPS 11-10	% Error	AMPS 12-10	% Error	AMPS 13-10	% Error
LOAD												
1/2	120	1.26	120	1.26	120	1.26	22.9	14.5	22.9	14.5	23.9	19.5
1/4	120	2.5	120	2.5	120	2.5	47.9	0.21	47.9	0.21	48.9	1.85
3/4	120	3.0	120	3.0	120	3.0	80.2	0.25	80.2	0.25	82.3	6.47
100%	120	4.34	120	3.9	120	3.9	107.2	3.47	107.2	3.47	109.3	5.1
4/4	120	4.8	120	4.34	120	3.9	107.2	3.47	107.2	3.47	109.3	5.1
UNIT FAILED TEST - VOLTMETER 5.5V OFF AT 1/4 LOAD 11-10												

8-388

BEGIN SCAN GROUP 1 04 FEB 88 16:46:05
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	386.28	DEG.	F
C	2	EXHAUST 2	295.15	DEG.	F
C	3	EXHAUST 3	353.83	DEG.	F
C	4	EXHAUST 4	383.11	DEG.	F
C	7	ENG. COOL. IN	166.17	DEG.	F
C	8	ENG. COOL. OUT	174.89	DEG.	F
C	9	OIL SUMP	189.42	DEG.	F
C	10	OIL GALLERY	191.11	DEG.	F
C	13	ENG. INTAKE	143.80	DEG.	F
C	14	RAD. TOP LEFT	148.74	DEG.	F
C	15	RAD. BTM LEFT	143.57	DEG.	F
C	16	RAD. TOP RIGHT	144.36	DEG.	F
C	17	RAD. BTM RIGHT	148.87	DEG.	F
C	18	GEN. AIR IN	121.32	DEG.	F
C	19	GEN. AIR OUT	152.38	DEG.	F
C	20	GEN. FRAME TOP	159.29	DEG.	F
C	21	GEN. FRAME BTM	144.23	DEG.	F
C	22	GEN. EXCITER	136.77	DEG.	F
C	23	GEN. VOLT. REG.	134.57	DEG.	F
C	24	CONTROL PANEL	133.68	DEG.	F
C	25	RELAY AREA	129.88	DEG.	F
C	27	BATTERY RIGHT	127.51	DEG.	F
C	28	AIR IN SET	128.18	DEG.	F
C	29	FUEL TANK	118.74	DEG.	F
C	30	FUEL OUTLET	143.63	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:46:14

STOPPED SINGLE SCAN 04 FEB 88 16:46:14

BEGIN SCAN GROUP 1 04 FEB 88 16:47:35
30 KW/400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	482.48	DEG.	F
C	2	EXHAUST 2	322.66	DEG.	F
C	3	EXHAUST 3	378.29	DEG.	F
C	4	EXHAUST 4	389.24	DEG.	F
C	7	ENG. COOL. IN	169.21	DEG.	F
C	8	ENG. COOL. OUT	179.51	DEG.	F
C	9	OIL SUMP	192.48	DEG.	F
C	10	OIL GALLERY	195.83	DEG.	F
C	13	ENG. INTAKE	135.63	DEG.	F
C	14	RAD. TOP LEFT	139.65	DEG.	F
C	15	RAD. BTM LEFT	148.47	DEG.	F
C	16	RAD. TOP RIGHT	143.64	DEG.	F
C	17	RAD. BTM RIGHT	143.97	DEG.	F
C	18	GEN. AIR IN	122.95	DEG.	F
C	19	GEN. AIR OUT	152.32	DEG.	F
C	20	GEN. FRAME TOP	154.56	DEG.	F
C	21	GEN. FRAME BTM	141.49	DEG.	F
C	22	GEN. EXCITER	131.86	DEG.	F
C	23	GEN. VOLT. REG.	133.78	DEG.	F
C	24	CONTROL PANEL	133.31	DEG.	F
C	25	RELAY AREA	128.53	DEG.	F
C	27	BATTERY RIGHT	129.36	DEG.	F
C	28	AIR IN SET	123.82	DEG.	F
C	29	FUEL TANK	118.72	DEG.	F
C	30	FUEL OUTLET	146.34	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:47:43

STOPPED SINGLE SCAN 04 FEB 88 16:47:43

BEGIN SCAN GROUP 1 04 FEB 88 16:48:41
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	406.82	DEG.	F
C	2	EXHAUST 2	333.84	DEG.	F
C	3	EXHAUST 3	382.61	DEG.	F
C	4	EXHAUST 4	422.92	DEG.	F
C	7	ENG. COOL. IN	171.74	DEG.	F
C	8	ENG. COOL. OUT	181.43	DEG.	F
C	9	OIL SUMP	194.95	DEG.	F
C	10	OIL GALLERY	197.98	DEG.	F
C	13	ENG. INTAKE	132.75	DEG.	F
C	14	RAD. TOP LEFT	139.89	DEG.	F
C	15	RAD. BTM LEFT	139.99	DEG.	F
C	16	RAD. TOP RIGHT	142.97	DEG.	F
C	17	RAD. BTM RIGHT	143.97	DEG.	F
C	18	GEN. AIR IN	124.48	DEG.	F
C	19	GEN. AIR OUT	153.86	DEG.	F
C	20	GEN. FRAME TOP	152.75	DEG.	F
C	21	GEN. FRAME BTM	139.58	DEG.	F
C	22	GEN. EXCITER	135.49	DEG.	F
C	23	GEN. VOLT. REG.	133.89	DEG.	F
C	24	CONTROL PANEL	133.11	DEG.	F
C	25	RELAY AREA	128.13	DEG.	F
C	27	BATTERY RIGHT	130.88	DEG.	F
C	28	AIR IN SET	125.14	DEG.	F
C	29	FUEL TANK	118.94	DEG.	F
C	30	FUEL OUTLET	147.46	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:48:49

STOPPED SINGLE SCAN 04 FEB 88 16:48:50

BEGIN SCAN GROUP 1 04 FEB 88 16:52:57
30 KW/400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	472.14	DEG.	F
C	2	EXHAUST 2	394.55	DEG.	F
C	3	EXHAUST 3	474.87	DEG.	F
C	4	EXHAUST 4	509.27	DEG.	F
C	7	ENG. COOL. IN	188.44	DEG.	F
C	8	ENG. COOL. OUT	188.88	DEG.	F
C	9	OIL SUMP	204.81	DEG.	F
C	10	OIL GALLERY	207.57	DEG.	F
C	13	ENG. INTAKE	138.68	DEG.	F
C	14	RAD. TOP LEFT	143.69	DEG.	F
C	15	RAD. BTM LEFT	141.99	DEG.	F
C	16	RAD. TOP RIGHT	143.81	DEG.	F
C	17	RAD. BTM RIGHT	172.18	DEG.	F
C	18	GEN. AIR IN	125.82	DEG.	F
C	19	GEN. AIR OUT	154.89	DEG.	F
C	20	GEN. FRAME TOP	158.75	DEG.	F
C	21	GEN. FRAME BTM	136.88	DEG.	F
C	22	GEN. EXCITER	136.28	DEG.	F
C	23	GEN. VOLT. REG.	133.86	DEG.	F
C	24	CONTROL PANEL	133.64	DEG.	F
C	25	RELAY AREA	129.56	DEG.	F
C	27	BATTERY RIGHT	138.85	DEG.	F
C	28	AIR IN SET	126.39	DEG.	F
C	29	FUEL TANK	111.57	DEG.	F
C	30	FUEL OUTLET	148.85	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:53:05

STOPPED SINGLE SCAN 04 FEB 88 16:53:05

BEGIN SCAN GROUP 1 04 FEB 88 16:54:43
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	548.74	DEG.	F
C	2	EXHAUST 2	436.19	DEG.	F
C	3	EXHAUST 3	535.05	DEG.	F
C	4	EXHAUST 4	602.71	DEG.	F
C	7	ENG. COOL. IN	183.46	DEG.	F
C	8	ENG. COOL. OUT	190.66	DEG.	F
C	9	OIL SUMP	207.53	DEG.	F
C	10	OIL GALLERY	210.98	DEG.	F
C	13	ENG. INTAKE	131.37	DEG.	F
C	14	RAD. TOP LEFT	145.37	DEG.	F
C	15	RAD. BTM LEFT	144.83	DEG.	F
C	16	RAD. TOP RIGHT	145.13	DEG.	F
C	17	RAD. BTM RIGHT	148.87	DEG.	F
C	18	GEN. AIR IN	127.84	DEG.	F
C	19	GEN. AIR OUT	156.17	DEG.	F
C	20	GEN. FRAME TOP	151.76	DEG.	F
C	21	GEN. FRAME BTM	136.67	DEG.	F
C	22	GEN. EXCITER	139.44	DEG.	F
C	23	GEN. VOLT. REG.	133.12	DEG.	F
C	24	CONTROL PANEL	133.80	DEG.	F
C	25	RELAY AREA	131.38	DEG.	F
C	27	BATTERY RIGHT	138.62	DEG.	F
C	28	AIR IN SET	129.19	DEG.	F
C	29	FUEL TANK	112.26	DEG.	F
C	30	FUEL OUTLET	147.98	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:54:52

STOPPED SINGLE SCAN 04 FEB 88 16:54:52

BEGIN SCAN GROUP 1 04 FEB 88 16:57:14
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	664.46	DEG.	F
C	2	EXHAUST 2	508.29	DEG.	F
C	3	EXHAUST 3	648.87	DEG.	F
C	4	EXHAUST 4	741.75	DEG.	F
C	7	ENG. COOL. IN	188.56	DEG.	F
C	8	ENG. COOL. OUT	195.86	DEG.	F
C	9	OIL SUMP	222.35	DEG.	F
C	10	OIL GALLERY	215.83	DEG.	F
C	13	ENG. INTAKE	138.96	DEG.	F
C	14	RAD. TOP LEFT	147.98	DEG.	F
C	15	RAD. BTM LEFT	145.39	DEG.	F
C	16	RAD. TOP RIGHT	146.73	DEG.	F
C	17	RAD. BTM RIGHT	149.86	DEG.	F
C	18	GEN. AIR IN	124.14	DEG.	F
C	19	GEN. AIR OUT	155.89	DEG.	F
C	20	GEN. FRAME TOP	151.67	DEG.	F
C	21	GEN. FRAME BTM	135.69	DEG.	F
C	22	GEN. EXCITER	138.87	DEG.	F
C	23	GEN. VOLT. REG.	133.12	DEG.	F
C	24	CONTROL PANEL	134.35	DEG.	F
C	25	RELAY AREA	138.72	DEG.	F
C	27	BATTERY RIGHT	131.81	DEG.	F
C	28	AIR IN SET	125.87	DEG.	F
C	29	FUEL TANK	111.61	DEG.	F
C	30	FUEL OUTLET	148.88	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:57:23

STOPPED SINGLE SCAN 04 FEB 88 16:57:23

BEGIN SCAN GROUP 1 04 FEB 88 16:59:24
30 KW 400 HZ GEN SET S/N R27 0003

C	1	EXHAUST 1	782.11	DEG.	F
C	2	EXHAUST 2	602.53	DEG.	F
C	3	EXHAUST 3	749.15	DEG.	F
C	4	EXHAUST 4	838.68	DEG.	F
C	7	ENG. COOL. IN	193.88	DEG.	F
C	8	ENG. COOL. OUT	201.26	DEG.	F
C	9	OIL SUMP	218.32	DEG.	F
C	10	OIL GALLERY	219.21	DEG.	F
C	13	ENG. INTAKE	132.17	DEG.	F
C	14	RAD. TOP LEFT	150.83	DEG.	F
C	15	RAD. BTM LEFT	148.54	DEG.	F
C	16	RAD. TOP RIGHT	148.28	DEG.	F
C	17	RAD. BTM RIGHT	151.98	DEG.	F
C	18	GEN. AIR IN	124.21	DEG.	F
C	19	GEN. AIR OUT	157.97	DEG.	F
C	20	GEN. FRAME TOP	151.98	DEG.	F
C	21	GEN. FRAME BTM	135.41	DEG.	F
C	22	GEN. EXCITER	139.27	DEG.	F
C	23	GEN. VOLT. REG.	134.69	DEG.	F
C	24	CONTROL PANEL	134.91	DEG.	F
C	25	RELAY AREA	132.17	DEG.	F
C	27	BATTERY RIGHT	131.76	DEG.	F
C	28	AIR IN SET	126.86	DEG.	F
C	29	FUEL TANK	113.87	DEG.	F
C	30	FUEL OUTLET	149.49	DEG.	F

END SCAN GROUP 1 04 FEB 88 16:59:32

STOPPED SINGLE SCAN 04 FEB 88 16:59:33